DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR 1987

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS
HOUSE OF REPRESENTATIVES

NINETY-NINTH CONGRESS

SECOND SESSION

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUDGET JUSTIFICATIONS, F. Y. 1987

March 3, 1849

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BUREAU OF LAND MANAGEMENT

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

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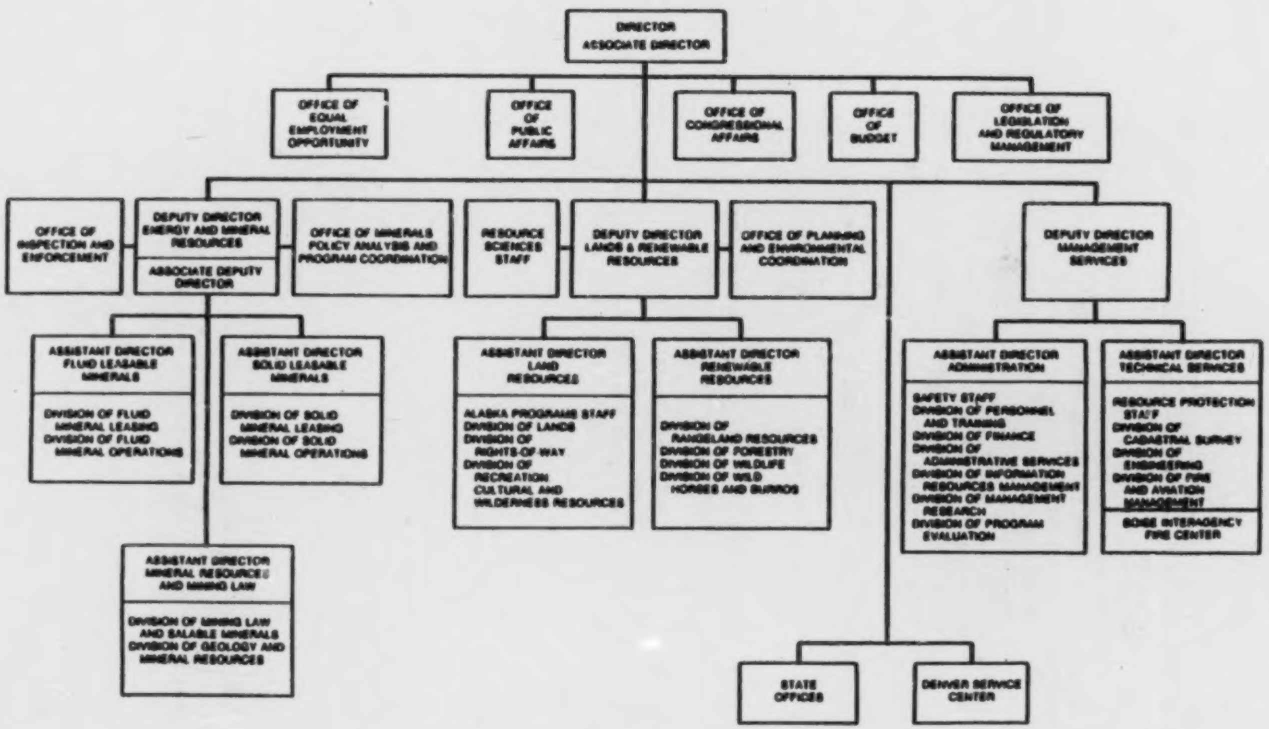
BUREAU OF LAND MANAGEMENT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STATE OFFICES
DENVER SERVICE CENTER

Bureau of Land Management

Headquarters and Field Organization

Organization - The program and functions of the Bureau of Land Management (BLM) are carried out through the following major organizational components:

a) The Headquarters Office, consisting of the Bureau Director, Associate Director, Deputy Directors, Assistant Directors, and the staff offices and divisions reporting to them (see organization chart), provides national policy formulation and program direction for each of the programs implemented under the BLM's multiple-use mandate to manage the public lands; maintains contacts with Departmental offices, the Office of Management and Budget, Office of Personnel Management, the Congress, other Federal and State agencies, national organizations, the media and members of the public; and provides centralized administrative direction and procedures for Bureauwide activities.

b) State Offices (12), each headed by a State Director, have overall responsibility for providing policy, procedural, and operational guidance for all BLM resource and minerals management programs within the States under their jurisdictions and for supervising subordinate District Offices.

c) District Offices (55), each headed by a District Manager who reports to the State Director, have responsibility for all Bureau program implementation, operations, land use planning, and user contacts at the local level, including the direction of Area Managers who are responsible for on-the-ground program implementation within their respective areas.

d) Bureauwide support offices: (1) the Denver Service Center, headed by the Service Center Director, provides Bureauwide technical, scientific, data mangement and administrative services; and (2) the Boise Interagency Fire Center (BIFC), headed by the BLM Fire Center Director, provides training, logistical support and aviation management services for the Bureau's fire program.

General Statement

The Bureau of Land Management (BLM) was established on July 16, 1946, through the consolidation of the General Land Office (created in 1812) and the Grazing Service (formed in 1934), in accordance with the provisions of Sections 402 and 403 of the President's Reorganization Plan No. 3 of 1946 (60 Stat. 1097). The functions of the Bureau and its directorate are also addressed in Section 301 of the Federal Land Policy and Management Act of 1976 (43 USC 1731).

BLM is responsible for carrying out a full range of programs for the conservation, development and management of both surface and mineral resources on approximately 340 million acres of public lands located in 28 States including Alaska. This land estate constitutes about 13 percent of the total land surface of the United States. In addition, BLM administers mineral leasing and supervises mineral operations on 370 million acres of mineral estate underlying other federally-administered, State or private ownerships throughout the United States, and supervises most mineral operations on Indian lands.

The Bureau's primary objective is to manage the public lands and their resources under the concept of multiple-use through attaining the best combination of uses that an area is capable of sustaining to provide maximum public benefit. Renewable resources are managed to recognize the Nation's needs for domestic sources of food, fiber, timber and wildlife on a sustained yield basis and to make significant contributions to national, regional and local economies which depend upon public land resources. Mineral resources are managed to provide a secure domestic source of energy and strategically important nonenergy minerals, to ensure orderly and timely development, and to obtain fair market value return to the Federal Government. The public lands also provide many opportunities for human use and enjoyment through recreational, ecological, scientific, and other nonconsumptive activities. BLM manages the public lands with these interests in mind as well as with concern for environmental protection, service to the public, and opportunity for public involvement in the development of BLM plans, managerial considerations, and regulations.

The FY 1987 Budget reflects our continuing commitment to effective stewardship of the public lands and their mineral, renewable, and other natural resources; including protecting these lands and resources, making them available for orderly development and use to provide economic benefits to the Nation, and ensuring their availability for the enjoyment and benefit of all Americans. The 1987 Budget proposes funding at levels appropriate to meet these management objectives and commitments for the public lands, yet is a level of funding consistent with the national mandate to reduce the Federal deficit and control Federal spending in 1987. The Secretary's initiative to "take pride in America" is an integral part of this management philosophy to encourage individual citizens, groups and private organizations to make a commitment to care about the public lands and resources. The budget includes a continuing emphasis on volunteerism and private investments on the public lands, as well as working with State and local governments and private users to share in funding and administration of many different activities where there is predominantly local interest.

The Budget assumes that proposed legislation will be enacted to authorize the interchange of land management responsibilities between the Forest Service and BLM by FY 1987, with implementation to begin during that year. A separate request of $3.4 million for BLM implementation costs of the interchange is included in the Budget.

Comparison of 1987 Estimates with 1986 Appropriations Enacted to Date:

(Dollar amounts in thousands)

		FY 1986 Enacted to Date	FY 1987 Estimate	Inc. (+) or Dec. (-)	Permanent Employment 12/31/85
Management of Lands and Resources	$	396,175	375,685	-20,490	
	(FTE-T)	(8,520)	(8,286)	(-234)	7,233
Construction and Access	$	1,395	1,200	-195	
	(FTE-T)	(25)	(25)	(---)	22
Land Acquisition	$	2,286	---	-2,286	
	(FTE-T)	(7)	(4)	(-3)	10
Payments in Lieu of Taxes	$	104,370	105,000	+630	
	(FTE-T)	(1)	(1)	(---)	1
Oregon and California Grant Lands	$	55,777	51,160	-4,617	
	(FTE-T)	(998)	(988)	(-10)	840
Range Improvements	$	10,000	8,506	-1,494	
	(FTE-T)	(119)	(114)	(-5)	93
Service Charges, Deposits, and Forfeitures (Indefinite)	$	4,247	5,195	+948	
	(FTE-T)	(57)	(57)	(---)	48
Miscellaneous Trust Funds (Current, Indefinite)	$	100	100	---	
	(FTE-T)	(---)	(---)	(---)	---
Total, Current Appropriations Requested	$	574,350	546,846	-27,504	
	(FTE-T)	(9,727)	(9,475)	(-252)	8,247
Permanent and Trust Funds					
Special Acquisition of Lands and Minerals (Borrowing Authority)	$	1,300	1,300	---	
	(FTE-T)	(---)	(---)	(---)	---
Operations and Maintenance of Quarters	$	250	250	---	
	(FTE-T)	(2)	(2)	(---)	---
Miscellaneous Permanent	$	15,154	51,173	+36,019	
	(FTE-T)	(95)	(95)	(---)	73
Miscellaneous Trust Funds	$	600	600	---	
	(FTE-T)	(30)	(30)	(---)	21
Subtotal, Permanent	$	17,304	53,323	+36,019	
	(FTE-T)	(127)	(127)	(---)	94
Proposed BLM/Forest Service Interchange	$	---	3,400	+3,400	
	(FTE-T)	(---)	(-37)	(-37)	---
Other Accounts	(FTE-T)	(203)	(193)	(-10)	227
Budget Authority, Total BLM	$	591,654	603,569	+11,915	
	(FTE-T)	(10,057)	(9,758)	(-299)	8,568

Highlights of FY 1987 Request

The 1987 Budget Estimate for the Bureau of Land Management (BLM) is $603.6 million, an increase of $11.9 million from the 1986 appropriations enacted to date. The Estimate includes $51.2 million in Miscellaneous Permanent Appropriations, $1.3 million as an estimate of interest accrued on the unused portion of bidding rights issued for acquisition of non-Federal minerals in the Rattlesnake Wilderness Area, and $.6 million in Miscellaneous Trust Funds. This constitutes a combined increase of $36.0 million from the 1986 Estimate for permanent appropriations and trust funds.

For operating funds and Payments in Lieu of Taxes (PILT), for which current appropriations are requested, the 1987 Estimate is $546.8 million, a decrease of $27.5 million from the 1986 level.

Special emphasis is given throughout the 1987 Budget to the resource management priorities for the Department as established by the Secretary. These include increased partnership and cooperative endeavors with States, private individuals and organizations to improve management of the public lands and resources; continued improvements in the areas of water resources and Indian and Native self-determination; wilderness review; and improved agency management practices through the application of information technology. Funding priority has also been placed on those programs which protect existing public investment in facilities and resource projects, respond to significant regional and local economic needs, and ensure both visitor and resource protection.

The changes between the 1986 Estimate and the 1987 Estimate for each appropriation are highlighted below:

Management of Lands and Resources

The 1987 request for the "Management of Lands and Resources" (MLR) appropriation is $375.7 million, a decrease of $20.5 million from the 1986 appropriation. Within this appropriation, a $6.3 million decrease from the 1986 appropriation in the energy and minerals activity is possible due to decreased industry demand in coal, oil shale/tar sands, geothermal, and nonenergy mineral leasing. An increase of $2 million in the oil and gas program will be used to accomplish additional diligent development reviews of Indian leases as required by law, process additional lease adjustments, and increase inspections of Federal leases both with in-house staff and through implementation of delegation agreements with the States under the authority of section 205 of the Federal Oil and Gas Royalty Management Act (FOGRMA).

A decrease of $2.8 million for lands and realty management will be possible by slowing the pace of interim conveyances and tentative approvals of land transfers in Alaska for the State and Alaska Natives and the realization of program efficiencies.

The 1987 request provides $107.8 million for the renewable resources management activity, a decrease of $10.2 million from the 1986 appropriations level.

A decrease of $2.6 million in forest management is a result of reducing the number of marginal timber sales offered in public domain States and by eliminating $914,000 provided in MLR for support of the western Oregon forestry program.

A decrease of $1.5 million in the range management program is a result of decreasing removals in the wild horse and burro program and increasing emphasis on adoptions with the goal of reducing long-term maintenance costs for captured animals.

Decreases will be possible in the soil, water, and air management program by reducing soil and water inventories while still providing the level needed to meet the grazing EIS schedule and energy leasing goals. The more expensive soil and water development projects will be deferred in favor of completing smaller, less costly facilities. The hazardous materials program will be continued at the 1986 enacted level.

A decrease of $2.3 million in wildlife habitat management reflects: 1) emphasis on efforts for currently listed threatened/endangered species and reducing efforts on species not in danger of extinction or only proposed for listing; 2) emphasis on implementing current habitat management plans rather than preparing new ones, and 3) elimination of the experimental matching fund program for Desert Bighorn Sheep.

The decreases in the recreation management subactivity reflect deferral of new activity plans, site stabilization and protection work in the cultural resources program, savings resulting from improved efficiency in the issuance of recreation permits and limitation of recreation activity planning and protection projects to the most critical recreation areas.

An increase in fire management is for the operation and maintenance of the Bureau's Initial Attack Management System (IAMS) which will improve fire suppression readiness.

An increase of $1.3 million is proposed for the planning and data management activity to support increased efforts involving intergovernmental coordination and public participation for planning, technical support to field users, purchase of additional ADP equipment, and maintenance of existing equipment used for data management.

The 1987 Budget reduces funding for cadastral survey by $3.9 million. This decrease is related to the surveys of inholdings and other parcels included in larger blocks of land being conveyed to the State of Alaska and Alaska Natives.

The decrease of $415,000 in recreation maintenance funding would reduce the frequency of maintenance at several recreation, picnic and undeveloped sites and reduce frequency of cleanup conducted at undeveloped sites.

The 1987 Budget provides a net increase of $2.0 million for the general administration and fixed costs related to operating the entire Bureau. Within this activity, decreases of $1.3 million are proposed in executive and managerial direction, equal employment opportunity program, and administrative services support programs reflecting efforts to improve management efficiency, consolidate administrative support service functions and reduce the size of headquarters and administrative organizations. Increased funding of $3.3 million is needed to cover fixed costs such as commercial telephones and telephone equipment charges, the additional costs associated with employee transfer of duty station allowances, and other new requirements.

Construction and Access

The 1987 request of $1.2 million for the access program reflects a continuing program level for the purchase of easements necessary to move products to market and develop needed resources. No funding for new construction projects is requested.

Land Acquisition

No new funding for land acquisition projects is requested in the 1987 Budget.

Payments in Lieu of Taxes

The request for Payments in Lieu of Taxes (PILT) is $105 million, a $.6 million increase over the amount appropriated in 1986. This level should provide the full level of payments to counties as authorized under current statutory formulas. It is projected that this funding will increase to $132 million in 1988 as a result of the net receipt sharing initiative.

Oregon and California Grant Lands

The 1987 request for the "Oregon and California Grant Lands" appropriation is $51.2 million, a decrease of $4.6 from the 1986 appropriation. Reduced program requirements in timber management and timber development are the result of reoffering timber from contracts which were returned to BLM under the provisions of the Federal Timber Contract Payment Modification Act (FTCPMA) of 1984, and from streamlining sale procedures.

Range Improvements

The request for range improvement funds is $8.5 million, a decrease of $1.5 million from the FY 1986 appropriation. The grazing fee for the 1985 and 1986 grazing years is $1.35 per animal unit month (AUM). This fee level will generate $8.5 million for range improvements in 1987, and no request is being made for a $10 million minimum program as authorized by Section 401 of FLPMA as amended.

Special Acquisition of Lands and Minerals

The only program for 1987 is the permanent appropriation of borrowing authority representing the interest on the unused portion of bidding rights held by private companies from the acquisition of mineral rights in the Rattlesnake Wilderness Area. Interest will continue to accrue at an annual level of $1.3 million.

Service Charges, Deposits, and Forfeitures

Under the provisions of the Federal Land Policy and Management Act (FLPMA) of 1976, costs related to processing applications for rights-of-way, other land use authorizations, conveyances of Federal mineral interests under private lands, adoption of wild horses and burros, and repairs to damaged property can be recovered through service charges, deposits of funds, and forfeitures of performance bonds. In 1987 collections associated with these actions which will become available for use by the Bureau are estimated at $5.2 million.

Miscellaneous Trust Funds

Section 307 of FLPMA authorizes the Bureau to accept contributions for costs of certain conveyances of omitted lands and for resource management projects, provided that the amounts are appropriated. The estimate for amounts requiring current appropriation is $.1 million for FY 1987. In addition, other contributions are permanently appropriated for resource improvement projects and land survey work.

BLM/FS Interchange

The 1987 Budget includes a separate transmittal of $3.4 million requested in conjunction with proposed legislation to implement the interchange of responsibilities for the management of lands between the Bureau and the Forest Service. The interchange is designed to improve efficiency and economy of operations and to provide better service to the public. A legislative proposal will be submitted to Congress in February 1986.

Miscellaneous Permanent Appropriations

A number of statutes provide that a specified percentage of the revenues generated by the sale of public lands, mineral resources and surface resource products is shared with States or counties within which the revenue was generated. These amounts are permanently appropriated under the terms of these laws. In 1987, it is estimated that $51.2 million will be paid to States and counties under these appropriations. This represents an increase of $36 million from the estimated payments in 1986 when an early payment to Oregon and California Grant Land (O&C) counties from 1985 receipts caused 1986 budget authority to be reflected at an unusually low amount.

The 1987 estimated payments to O&C counties also reflect a proposal to start sharing revenues on a net receipt, rather than a gross receipt, basis, resulting in an estimated payment to counties of approximately $40.1 million.

Receipts

In FY 1987, BLM will collect an estimated $254.2 million in receipts from sales of lands and vegetative products, grazing fees, timber sales and other miscellaneous sources. This is an increase of $24.4 million from these sources in FY 1986. Most of this projected increase will result from increased timber harvesting on O&C lands.

In addition, BLM activities contribute directly to the generation of more than $1 billion in receipts (bonuses, rents, royalties) connected with the leasing of onshore Federal minerals. (These receipts are now accounted for and disbursed by the Minerals Management Service.)

Authorization

Legislative authorizations for appropriation previously enacted in response to Section 318 of the Federal Land Policy and Management Act of 1976 (P.L. 94-579) have expired.

RECEIPTS BY SOURCE

The following table shows total actual receipts collected by the Bureau of Land Management in Fiscal Years 1982, 1983, 1984 and 1985 and estimated receipts for Fiscal Years 1986 and 1987 by source.

(Dollars in thousands)

	Actual 1982	Actual 1983	Actual 1984	Actual 1985	Estimate 1986	Estimate 1987
Sales, Public Land and Materials	$ 3,599	$ 11,528	$ 9,175	$ 12,397	$ 14,300	$ 11,300
Noncompetitive Filing Fees	107,500	86,175	-5,039	28,558	30,000	30,000
Registration and Misc. Filing Fees	4,428	2,342	2,215	2,049	2,300	2,300
Mineral Leasing 1/	1,313,069	949,264	--- 2/	--- 2/	--- 2/	--- 2/
Grazing Fees	20,879	16,699	16,116	14,756	15,123	15,123
Timber Sales	87,401	106,850	154,278	137,557	151,000	178,600
Recreation/Use Fees	513	587	671	759	1,000	1,000
Miscellaneous Receipts, Services Chgs. & Fees	92,826	14,720	15,319	18,858	16,121	15,901
TOTAL	$1,630,215	$1,188,165	$192,735	$214,934	$229,844	$254,224

1/ Includes mineral leasing receipts collected by BLM and transferred to other agencies.

2/ Functions transferred to Minerals Management Service in FY 1984.

Receipts by Source -- Descriptions

1. Sale of Public Lands and Materials - This category includes receipts from the sale of public lands and materials with the following exceptions:

a. Receipts from sale of timber from the public domain;

b. Receipts from sale of lands and materials from Oregon and California (O&C) and Coos Bay Wagon Road (CBWR) lands;

c. Receipts from sale of lands and materials from Land Utilization (LU) project lands;

d. Receipts from sale of lands and materials from Reclamation lands (reserved or withdrawn); and

e. Receipts from sale of townsites and reclamation projects.

2. Noncompetitive Filing Fees - An estimated $30 million per year in simultaneous oil and gas (SOG) filing fees will be collected in 1986 and 1987. The estimate is based upon receiving approximately 400,000 filings per year at $75 per filing.

3. Registration and Filing Fees - This category includes fees received for filing or recording documents. Also included are charges for registration of individuals, firms or products. In 1987, based on historical data, an estimated $2.3 million in registration fees will be collected.

4. Mineral Leasing - This includes receipts (including bonuses, royalties, and rents) collected from leasing of oil and gas, coal, oil shale, geothermal, and other minerals on public lands and acquired lands administered under the Mineral Leasing Act (MLA) and the Acquired Lands Leasing Act, including LU lands and O&C lands although these receipts are not distributed under the MLA formulas.

The Minerals Management Service assumed responsibility for collection and distribution of mineral leasing royalty and rental receipts in 1984. BLM continues to collect first-year rentals and initial bonuses from mineral leasing but deposits these receipts directly into MMS accounts.

5. Grazing Fees - Grazing fees have been based on the formula established in the Public Rangelands Improvement Act (PRIA) of 1978. The formula includes forage value index, private land lease rates, beef cattle prices and the price paid to ranchers for finished beef cattle. The grazing fee for 1985 was set at $1.35 per animal unit month (AUM) resulting in receipts of approximately $15 million. A joint BLM/Forest Service study of grazing fees has been completed and is under review within the Executive Branch. The receipts for 1986 and 1987 assume a continuation of the 1985 fee level. Grazing fees are collected into the following accounts:

a. Receipts from Land Utilization (LU) Lands, BLM. Includes receipts for grazing livestock on LU project lands acquired under the authority of the Bankhead-Jones Act of 1937 and transferred to the Department of the Interior by Executive Order (EO) 10787 and EO 10890 for administration by BLM under Section 15 of the Taylor Grazing Act (TGA). The receipt estimate for this account does not include receipts for mineral leasing on LU lands which are estimated to be about $1.9 million per year and are included with other minerals receipts reported by MMS. However, these receipts are transferred to BLM for distribution according to the same formula used for grazing fees.

b. Receipts from Grazing, etc., Public Lands Outside of Grazing Districts, BLM. Includes receipts collected from users of grazing lands outside BLM grazing districts:

- o Receipts from public lands leased for grazing under the authority of Section 15 of the Taylor Grazing Act of 1934 and LU lands transferred to the Department of the Interior by Executive Orders 10046, 10234, and 10322 to be administered according to Section 15 of TGA;
- o Receipts collected by other agencies under cooperative agreements; and
- o Crossing fees and trespass collections for Section 15 lands. Excludes grazing receipts from O&C and Coos Bay Wagon Road (CBWR) lands and LU lands transferred by Executive Orders 10787 and 10890 and receipts covered by other laws.

c. Receipts from Grazing, etc., Public Lands Within Grazing Districts, BLM. Includes grazing receipts from public lands within organized grazing districts established under the authority of Section 3 of the Taylor Grazing Act of 1934 and from grazing on LU lands transferred under EO 10787 and EO 10890, and crossing fees and trespass collections from Section 3 lands.

Fifty percent of all receipts collected from Taylor Grazing Act Section 3 lands, Section 15 lands, and LU lands under BLM jurisdiction are allocated to the Range Improvements Fund. As provided in the Taylor Grazing Act and the Public Rangelands Improvement Act of 1978, when appropriated by Congress, these funds are available until expended for the construction, purchase and development of range improvements. Appropriations are made from the receipts collected in the previous fiscal year.

6. Timber Sales - Included are receipts from the sale of timber and other natural land products from the Oregon and California (O&C) Grant Lands and from the Coos Bay Wagon Road lands in Oregon, from reserved or withdrawn lands under the jurisdiction of the Bureau of Reclamation, from sale of townsites within reclamation projects, and from public domain timber sales. Estimates are based on historical data and anticipated changes in other factors affecting timber demand, such as housing construction.

Timber Receipts FY 1983-87

(Dollars in thousands)

	Actual			Estimates	
	FY 1983	FY 1984	FY 1985	FY 1986	FY 1987
Oregon and California Grant Lands	$ 92,306	$134,082	$122,248	$130,200	$154,400
Coos Bay Wagon Road	4,836	6,657	5,535	6,700	8,000
Public Domain (incl. western Oregon)	7,585	13,548	9,774	14,100	16,200
Total	$104,727	$154,287	$137,557	$151,000	$178,600

The increased receipt estimates for 1986 and 1987 largely reflect the anticipated harvest of high-bid timber sales purchased before January 1, 1982, with expiration dates extended by Executive Order through 1989. These are sales that were not bought out under provisions of the "Federal Timber Contract Payment Modification Act" (P.L. 98-478).

7. Recreation/Use Fees - Recreation use fees are collected primarily from concessionaires and other commercial recreation users, such as off-road vehicle (ORV) events and white water river rafting outfitters. The anticipated increase in receipts would result mainly from increases in fees charged to permittees, in part as a result of the phase-in of higher fees under 43 CFR, Part 8370.

8. Miscellaneous Receipts - There are four major categories of miscellaneous receipts not otherwise classified:

a. Rent of land (for grazing, commercial, industrial and residential purposes, and for campsites);

b. Revenues from special program services such as road maintenance and use fees, rights-of-way application processing fees, and wild horse and burro fees collected from adopters;

c. Fines, penalties and bond forfeitures; and

d. Annual rentals from rights-of-way permits.

Payments of Bureau of Land Management Receipts to States, Fiscal Year 1985

State	Mineral 1/ Leases and Permits	Forage Receipts Taylor Grazing Districts		Sale of Public Land and Materials	Other 2/	Total
		Outside	Inside			
Alabama............	---	---	---	338	---	338
Alaska.............	10,915,018	---	---	6,837	---	10,921,855
Arizona............	29,035	162,588	87,257	29,904	---	308,784
Arkansas...........	---	---	---	73	---	73
California.........	5,156	89,651	19,456	121,212	---	235,475
Colorado...........	258,577	31,890	72,712	35,812	---	398,991
Florida.......	---	---	---	320	---	320
Idaho..............	4,689	23,792	191,685	23,166	---	243,332
Illinois...........	---	---	---	1,016	---	1,016
Kansas.............	---	87	---	---	---	87
Minnesota..........	---	---	---	2,182	---	2,182
Mississippi........	---	---	---	534	---	534
Montana............	4,210	112,619	124,077	20,485	556,038	817,429
Nebraska...........	---	799	---	66	---	865
Nevada.............	---	26,929	323,135	860,716	---	1,210,780
New Mexico.........	329,998	154,609	211,886	23,081	12,548	732,122
North Dakota.......	133	6,500	---	569	---	7,202
Oklahoma...........	94	244	---	5,994	13,437	19,769
Oregon.............	7,799	32,991	154,100	481,088	117,462,098	118,138,376
South Dakota.......	15	50,947	---	1,494	---	52,456
Utah...............	23,088	---	171,879	18,189	506	213,662
Washington.........	99,014	19,379	---	15,934	---	134,327
Wyoming............	300,383	311,319	193,326	55,333	---	860,361
TOTAL	11,977,209	1,024,344	1,549,513	1,704,343	118,044,627	134,300,336

1/ The Bureau continues to make payments on receipts from the National Petroleum Reserve - Alaska and other minor categories of mineral receipts even though Minerals Management Service has primary responsibility for mineral receipts collections.

2/ "Other" payments reflect receipts from National Grasslands, oil and gas royalties in Oklahoma and O&C and Coos Bay Wagon Road receipts.

3/ Includes $116.9 million for O&C Grant Lands and $.5 million for Coos Bay Wagon Road timber receipts. Included in the $116.9 million was a prepayment of $50.9 million.

Appropriation Summary Statement

Appropriation: Management of Lands and Resources

The Management of Lands and Resources (MLR) appropriation, the largest of BLM's operating appropriations, funds a variety of functions necessary to develop, manage, and protect the public lands and resources (both surface and mineral) under the Bureau's jurisdiction. These activities include energy and minerals management, lands and realty management, renewable resources management, planning and data management, cadastral survey, firefighting and rehabilitation, technical services, and general administration. The 1987 Estimate is $375,685,000, a decrease of $20,490,000 from the 1986 appropriation enacted to date.

1. Energy and Minerals Management includes the resource evaluation, leasing and supervision of Federal and Indian coal, oil and gas, geothermal resources, oil shale, tar sands and nonenergy minerals; the assessment of environmental impacts of proposed minerals development and the implementation of measures to mitigate any adverse environmental effects; the administration of laws relating to mining on the public lands; and the sale of mineral materials. Also includes economic evaluation, post-lease supervision and inspection and enforcement.

   A. Fluid Energy Minerals program includes oil and gas leasing and geothermal leasing activities. The program provides for processing additional lease adjustments and diligent development reviews of Indian mineral leases, and for implementation of section 205 of FOGRMA providing for delegation of inspection authority to States and Indian Tribes. The Bureau is responsible for management of 130,000 Federal oil and gas leases on 135 million acres and 14,000 Indian leases.

   B. Solid Energy Minerals program includes coal leasing and oil shale/tar sands leasing activities. In coal, reduced demand and leasing have resulted in a proposed budget decrease in 1987. In the oil shale/tar sands program, a lack of private sector demand for Federal oil shale development results in a proposed termination of the Federal oil shale/tar sands program.

   C. Nonenergy Minerals program provides for leasing of certain minerals such as phosphate, potash, and uranium; the sale of common variety minerals such as sand and gravel; and the administration of programs relating to mining on the public lands.

2. Lands and Realty Management

   A. Realty Operations provides for processing applications for rights-of-way. Certain costs of rights-of-way processing are recovered through either a fee schedule or actual costs. Also, the program includes processing of land use authorizations; land disposal actions, such as State indemnity selections, desert land entries, and others; and land exchanges, both private and State. In Alaska, Native conveyances, conveyances to the State of Alaska, and Native allotments will be processed. The BLM's implementation of an automated land and mineral record system will be continued in 1987.

B. Withdrawal Processing and Review program emphasizes review of other agency withdrawals, processing of new withdrawal applications, and reviewing waterpower withdrawals.

3. Renewable Resources Management includes forest management; range management; soil, water and air management; wildlife habitat management; recreation management; and fire management. These activities provide for the development, utilization, protection, and sustained yield management of the natural resources on the public lands.

A. Forest Management provides for the management, development, protection, and sustained yield of timber production on about 1 million acres of public domain commercial forest land. In 1987 plans are to reduce marginal timber sales offered on public lands outside western Oregon. The sale objective for public domain is 60 million board feet.

B. Range Management provides for the management of livestock grazing for 4.3 million cattle, sheep, and horses on about 170 million acres of public rangeland and for management of 37,000 wild horses and 8,000 wild burros on the public lands.

(1) Wild Horse and Burro Management ensures viable populations of healthy free-roaming wild horses and burros, control of populations to prevent deterioration of range conditions, and humane care and treatment of animals through an adoption program. Increased emphasis will be placed on reducing long-term maintenance costs through increased adoptions and decreased removals.

(2) Grazing Management continues efforts to complete the court-ordered schedule for preparation of environmental impact statements (EIS's). Monitoring provides a data base for making supportable and equitable decisions and for evaluating progress in meeting resource management objectives. The program will continue to emphasize on-the-ground development of range improvements, including improvements which incorporate private cost sharing in the investments.

C. Soil, Water, and Air Management includes activities such as soil surveys; improving water quality through land treatment or development of facilities; maintaining watershed management structures and facilities; documenting and applying for water rights for public land uses; gathering soil, water and air quality data necessary to make resource management decisions; hazardous materials site inventory; and evaluating, ranking, and initiating cleanup action on the highest priority hazardous material sites on public lands.

D. Wildlife Habitat Management includes activities for the protection, management, and improvement of fish and wildlife habitats for all species dependent totally or partially on public lands for food and shelter; for cooperative management with other Federal and State wildlife agencies responsible for species management; and for the protection and management of habitat for threatened and endangered species of fish, wildlife, and plants. In addition, funds are included to match contributions by State agencies and wildlife interest groups who are willing to contribute funds or donate labor or materials for habitat improvement and maintenance.

E. Recreation Management includes the activities that allow the use of public lands for a wide variety of outdoor recreation purposes; the protection, interpretation, and management of historic and archaeological sites; and wilderness management.

(1) Cultural Resources Management focuses on protection, management and inventory of archaeological, cultural, paleontological and natural history resources on public lands. Emphasis will be on protection of the most valuable and critically threatened cultural, paleontological and natural history resources.

(2) Wilderness Management includes interim management on wilderness study areas, preparation of wilderness study reports and suitability recommendations, activity planning and management of designated wilderness areas, and coordination with the Geological Survey and Bureau of Mines on mineral surveys required by law.

(3) Recreation Resources Management focuses on 3 national conservation areas (including the California Desert), 1 national recreation area, over 150 areas where recreation use is heavily concentrated, 13 national wild and scenic rivers and 20 nationally designated trails. Less intensive management allows an equally significant amount of recreation to be provided on 52 rivers (over 4,000 miles) and on public lands.

F. Fire Management includes activities for developing fire techniques such as prescribed burning as a tool for resource management and for developing methods such as the Initial Attack Management System to improve fire suppression response to minimize loss of resources from wildfires and reduce costs.

4. Planning and Data Management includes land use planning and automated data management.

A. Planning provides for the development of resource management plans to provide a basis for decisions on energy and mineral production, rangeland management, lands and realty actions, timber production, and wilderness studies, as well as to resolve conflicts involving wildlife habitat, recreation, cultural resources, and other natural resources.

B. Data Management supports Bureau programs through the development and operation of automated systems for acquiring, storing, using, and disseminating data required for all aspects of the Bureau's programs, including both administration and natural resource management. This program provides essential ADP support to the implementation of the Bureau's automated land and mineral record system and the geographic information system.

5. Cadastral Survey provides for the identification of land boundaries and legal property descriptions to facilitate both BLM's land management programs and the needs of other Federal land-managing agencies.

A. Alaska surveys are performed on lands selected by the State for transfer under the Alaska Statehood Act, for Native townsites, Native allotments, entitlements under the Alaska Native Claims Settlement Act, and other special purposes.

B. Other States surveys identify land boundaries that are prerequisite to resource management activities and decisions. This primarily involves resurveys to reestablish boundaries and obliterated boundary markers. Emphasis will be placed on highest priority surveys needed in support of energy and minerals development programs, forestry operations, and realty program efforts.

6. Firefighting and Rehabilitation includes suppressing wildfires and protecting public lands and their natural resources and other values from loss or depletion due to wildfires. Since firefighting and rehabilitation expenditures depend on the actual occurrence and severity of fires or other disasters, they vary from year to year. Funding to cover total firefighting and rehabilitation expenditures is obtained through transfers or supplemental appropriations.

7. Technical Services includes resource protection and maintenance and engineering services.

   A. Resource Protection provides for the enforcement of laws and regulations governing the protection of public lands through primarily cooperative agreements with State, local, and Federal law enforcement agencies, but also with the Bureau law enforcement personnel.

   B. Maintenance and Engineering Services provides essential maintenance and engineering services to other Bureau programs. Maintenance includes activities for the care, upkeep, and protection of the investment in BLM buildings, roads, trails, and recreation sites. Engineering services include survey and design, contract administration, transportation system management, facility evaluation, and sign-making operations.

8. General Administration includes the Bureau's executive and managerial direction, the equal employment opportunity program, and administrative services such as financial management, personnel management, budget development, procurement, property management, records and directives, program evaluation, congressional liaison, and public information. Bureauwide fixed costs such as office space leasing, postage, communications, unemployment and injured workers compensation, and other Bureauwide service costs are funded under general administration.

Appropriation Language Sheet

Management of Lands and Resources

For expenses necessary for protection, use, improvement, development, disposal, cadastral surveying, classification, and performance of other functions, including maintenance of facilities, as authorized by law, in the management of lands and their resources under the jurisdiction of the Bureau of Land Management, including the general administration of the Bureau of Land Management, [$398,566,000] $375,685,000.

(16 U.S.C. 594; 30 U.S.C. 181 et seq., 351-359; 43 U.S.C. 2, 31(a), 52, 315, 1181 a, b, d-f, 1701, 1901; 78 Stat. 986; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Appropriation Language Citations

Appropriation: Management of Lands and Resources

For expenses necessary for protection, use, improvement, development, disposal, cadastral surveying, classification, and performance of other functions, including maintenance of facilities, as authorized by law, in the management of lands and their resources under the jurisdiction of the Bureau of Land Management, including the general administration of the Bureau of Land Management, [$398,566,000] $375,685,000.

16 U.S.C. 594
30 U.S.C. 181 et seq.
30 U.S.C. 351-359
43 U.S.C. 2
43 U.S.C. 31(a)
43 U.S.C. 32
43 U.S.C. 315
43 U.S.C. 1181 a,b, d-f
43 U.S.C. 1701 et seq.
78 Stat. 986
P.L. 99-190

16 U.S.C. 594 provides for the Secretary of the Interior to protect and preserve, from fire, disease, or the ravages of beetles or other insects, timber on the public lands owned by the United States.

30 U.S.C. 181 et seq., the Mineral Leasing Act of 1920, as amended, provides for the leasing of deposits of coal, phosphate, sodium, potassium, oil, oil shale, native asphalt, solid and semi-solid bitumen, and bituminous rock or gas, and lands containing such deposits owned by the United States, including those in national forests, but excluding those acquired under other acts subsequent to February 25, 1920, and those within the national petroleum and oil shale reserves.

30 U.S.C. 351-359, the Mineral Leasing Act for Acquired Lands, provide for the leasing of coal, phosphate, oil, oil shale, gas, sodium, potassium, and sulfur which are owned or acquired by the United States and which are within the lands acquired by the United States, with the consent of the head of the agency having jurisdiction over the lands containing such deposits.

43 U.S.C. 2 provides that the Secretary of the Interior, or such officer as he may designate, shall perform all executive duties appertaining to the surveying and sale of the public lands of the United States, or in anywise respecting such public lands, and, also, such as relate to private claims of land and the issuing of patents for all grants of land under the authority of the Government.

43 U.S.C. 31(a) provides for the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain.

43 U.S.C. 52 provides that the Secretary, or such officer as he may designate, shall cause to be surveyed, measured, and marked, without delay, all base and meridian lines through such points and perpetuated by such monuments, and such other correction parallels and meridians as may be prescribed; that all private land claims shall be surveyed after they have been confirmed by authority of Congress, so far as may be necessary to complete the survey of the public lands; and that he shall transmit general and particular plats of all lands surveyed by him to such officers as he may designate.

43 U.S.C. 315, the Taylor Grazing Act of 1934, as amended, provides that the Secretary of the Interior is authorized to establish grazing districts from any part of the public domain of the United States (exclusive of Alaska) which, in his opinion, are chiefly valuable for grazing and raising forage crops, to regulate and administer grazing use of the public lands, and to improve the public rangelands.

43 U.S.C. 1181 a, b, d-f provides for management of the revested Oregon and California Railroad and reconveyed Coos Bay Wagon Road grant lands for permanent forest production under the principle of sustained yield; for cooperative agreements with other agencies or private owners for coordinated administration; for leasing of lands for grazing; for performing any and all acts and for making such rules and regulations as may be necessary and proper for administering such lands; and for distribution of receipts.

43 U.S.C. 1701 et seq., the Federal Land Policy and Management Act of 1976, provides for public lands being retained in Federal ownership; for periodic and systematic inventory of the public lands and their resources; for a review of existing withdrawals and classifications; for establishing comprehensive rules and regulations for administering public land statutes; for multiple-use management on a sustained yield basis; for protection of scientific, scenic, historical, ecological, environmental, air and atmos- pheric, water resource, and archaeological values; for receiving fair market value for the use of the public lands and their resources; for establishing uniform procedures for any disposal, acquisition, or exchange; for protection of areas of critical environmental concern; and for recognizing the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands, including implementation of the Mining and Minerals Policy Act of 1970.

43 U.S.C 1901 et seq., the Public Rangelands Improvement Act of 1978, provides for the improvement of range conditions on public rangelands, research on wild horse and burro population dynamics, and other range management practices.

78 Stat. 986 provides for the classification of certain lands administered exclusively by the Secretary of the Interior in order to provide for their disposal or interim management under principles of multiple use and to produce a sustained yield of products and services. Although this authority has expired, the classifications remain in effect.

P.L. 99-190, the Department of the Interior and Related Agencies Appropriations Act, 1986, provides funding for BLM programs.

Summary of Requirements

(Dollar amounts in thousands)

Appropriation: Management of Lands and Resources	FTE-T	Amount	FTE-T	Amount
Appropriation currently available, 1986			8,520	396,175
P.L. 99-177 Budget Authority Cancellation			___	-17,036
Adjusted Appropriation, 1986			8,520	379,139
Adjustments to Base:				
Adjustment for 1986 impact of P.L. 99-177		+17,036		
Anticipated savings from management initiatives	-46	-2,648		
Transfer:				
From Renewable Resources Management, Fire Management To Fish and Wildlife Service, Bureau of Indian Affairs, National Park Service	---	-500		
Other increases and/or decreases:				
Employees Compensation Fund (BEC)	---	+302		
Rental payments to GSA	---	-937		
Net, other increases and/or decreases			---	-635
Total, Adjustments to Base			-46	-13,253
1987 Base Budget			8,474	392,392
Program Changes (Changes to Base budget, detailed below)			-188	-16,707
Total Requirements (1987 Estimate)			8,286	375,685

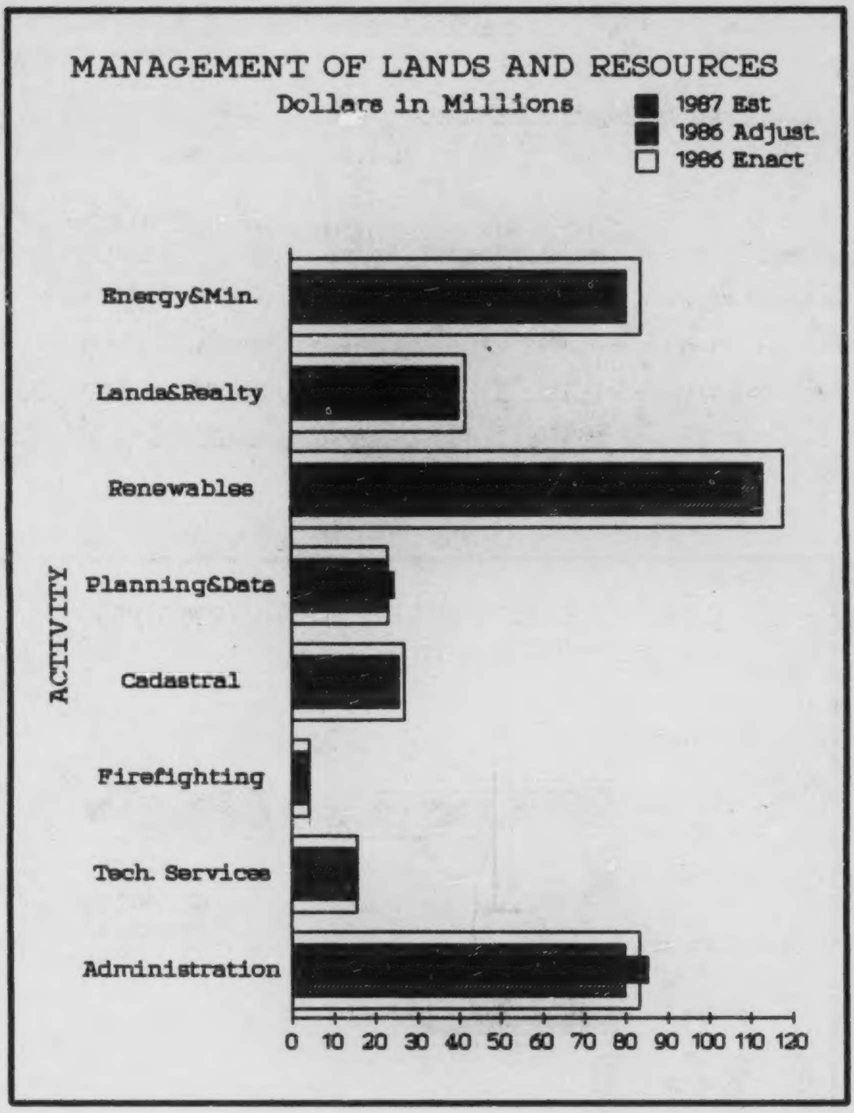
SUMMARY OF REQUIREMENTS

Comparison by activities/ subactivities	1985 Actual		1986 Enacted to Date		PL 99-177 Reduction	1986 Adjusted Approp.	1987 Base		1987 Estimate		Inc(+)/Dec(-) from 1986 Appropriation		Inc(+)/Dec(-) from 1986 Adjusted Approp.	Inc(+)/Dec(-) from 1987 Base	
	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Approp.	FTE-T	Amount
Energy & Minerals Mgmt.															
Fluid Energy Minerals	1206	46031	1271	47303	-2034	45269	1271	47104	1243	48994	-28	1691	3725	-28	1890
Solid Energy Minerals	322	20134	355	21436	-922	20514	355	21376	280	13695	-75	-7741	-6819	-75	-7681
Non-Energy Minerals	355	14709	366	15164	-652	14512	366	15108	361	14883	-5	-281	371	-5	-225
Subtotal	1883	80874	1992	83903	-3608	80295	1992	83588	1884	77572	-108	-6331	-2723	-108	-6016
Lands and Realty Management															
Realty Operations	970	37800	1005	37973	-1633	36340	1005	37822	985	35222	-20	-2751	-1118	-20	-2600
Withdrawal Processing & Review	100	4034	93	3744	-161	3583	93	3732	93	3732	0	-12	149	0	0
Subtotal	1070	41834	1098	41717	-1794	39923	1098	41554	1078	38954	-20	-2763	-969	-20	-2600
Renewable Resources Management															
Forest Management	152	7755	150	7728	-332	7396	150	7710	127	5106	-23	-2622	-2290	-23	-2604
Range Management	946	48808	905	47600	-2047	45553	905	47465	905	46060	0	-1540	507	0	-1405
Soil, Water, and Air Management	308	16459	290	16391	-705	15686	290	16299	278	14469	-12	-1922	-1217	-12	-1830
Wildlife Habitat Management	328	15033	320	16054	-690	15364	320	15961	300	13801	-20	-2253	-1563	-20	-2160
Recreation Management	429	18440	465	21397	-920	20477	465	21314	450	19530	-15	-1867	-947	-15	-1784
Fire Management	136	7398	140	8824	-380	8444	140	8248	145	8847	5	23	403	5	599
Subtotal	2299	113893	2270	117994	-5074	112920	2270	116997	2205	107813	-65	-10181	-5107	-65	-9184
Planning and Data Management															
Planning	215	9124	215	9453	-406	9047	215	9410	217	9525	2	72	478	2	115
Data Management	218	13613	220	13695	-589	13106	220	13658	235	14888	15	1193	1782	15	1230
Subtotal	433	22737	435	23148	-995	22153	435	23068	452	24413	17	1265	2260	17	1345
Cadastral Survey															
Alaska	141	13780	140	15083	-649	14434	140	15059	131	11069	-9	-4014	-3365	-9	-3990
Other States	284	10896	290	11673	-502	11171	290	11622	290	11622	0	-51	451	0	0
Subtotal	425	24676	430	26756	-1151	25605	430	26681	421	22691	-9	-4065	-2914	-9	-3990
Firefighting and Rehabilitation															
Firefighting & Presuppression	966	70010	848	3492	-150	3342	848	3492	848	3492	0	0	150	0	0
Rehabilitation	25	4091	20	584	-25	559	20	584	20	584	0	0	25	0	0
Subtotal	991	74101	868	4076	-175	3901	868	4076	868	4076	0	0	175	0	0
Technical Services															
Resource Protection	33	2351	33	3320	-143	3177	33	3320	33	3320	0	0	143	0	0
Maint. & Eng. Services	203	11851	199	12160	-523	11637	199	12145	196	11745	-3	-415	108	-3	-400
Subtotal	236	14202	232	15480	-666	14814	232	15465	229	15065	-3	-415	251	-3	-400
General Administration	1207	83136	1195	83101	-3573	79528	1149	80963	1149	85101	-46	2000	5573	0	4138
TOTAL REQUIREMENTS	8544	455453	8520	396175	-17036	379139	8474	392392	8286	375685	-234	-20490	-3454	-188	-16707

Justification of Base Adjustments

Management of Lands and Resources

	FTE	Amount ($000)
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellations ...	---	+17,036
The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177) requires a 4.3 percent reduction in non-exempt programs FY 1986. Since the 4.3 percent reduction applies to FY 1986 only, this adjustment is made to allow a more comparable basis for showing program changes from FY 1986 to FY 1987.		
Anticipated savings from management initiatives	-46	-2,648
Savings result from a planned reduction of 46 positions and the reduction in grade average achieved by refilling vacant positions at a lower grade.		
Employees Compensation Fund	---	+2
The increase in the repayment to the Employees Compensation Fund is the result of higher costs for compensation to injured employees. These charges will be reimbursed to the Department of Labor, Employees Compensation Fund, with FY 1986 funds pursuant to Public Law 94-273.		
Unemployment compensation payments	---	+300
The increase in payment to the Federal Employment Compensation Account (FECA) is the result of higher costs for unemployment compensation payments. These charges will be reimbursed to the Department of Labor, Federal Employment Compensation Fund, in 1985, pursuant to Public Law 96-499.		
Rental payments to GSA	---	-937
This adjustment reflects reduced space rental payments to GSA resulting from reappraisal by GSA of rental rates on all their leased space, as required under the new "Rent" system, which replaces the Standard Level User Charge (SLUC) rate structure in FY 1987.		
Fire Management	---	-500
This adjustment reflects the policy decision to seek reimbursement of base funding from sister Bureau's for fire protection in Alaska.		

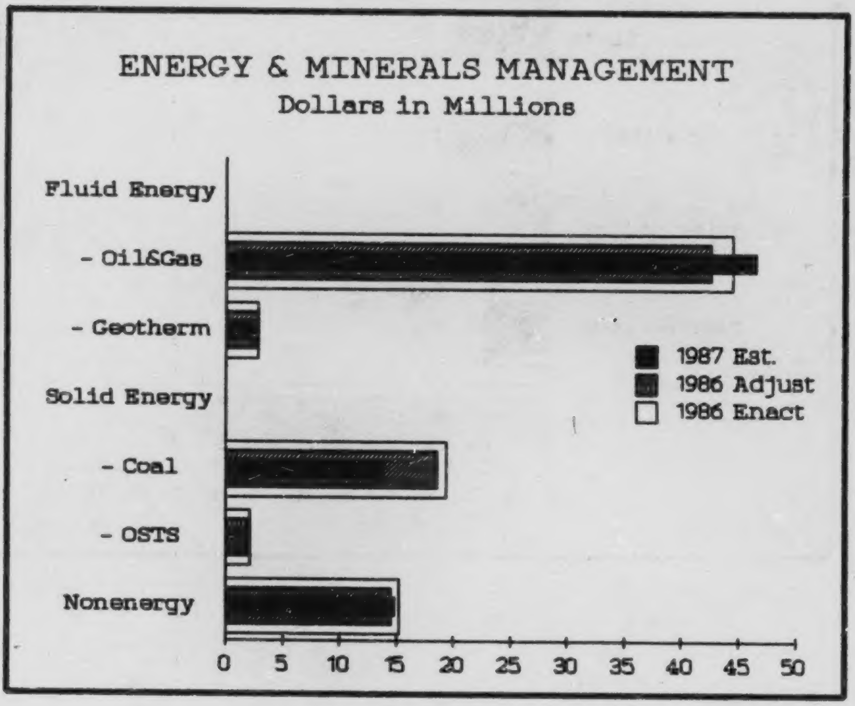

MANAGEMENT OF LANDS AND RESOURCES
Dollars in Millions
1987 Est
1986 Adjust.
1986 Enact
ACTIVITY
Energy&Min.
Lands&Realty
Renewables
Planning&Data
Cadastral
Firefighting
Tech. Services
Administration
0
10
20
30
40
50
60
70
80
90
100
110
120

Activity Summary

Activity: Energy and Minerals Management

(Dollars in thousands)

Subactivity	1985 Actual	1986 Approp. Enacted	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Fluid Energy Minerals	46,031	47,303	45,269	47,104	48,994	+1,890
Solid Energy Minerals	20,134	21,436	20,514	21,376	13,695	-7,681
Nonenergy Minerals	14,709	15,164	14,512	15,108	14,883	-225
Total	80,874	83,903	80,295	83,588	77,572	-6,016



Justification of Program and Performance

Activity: Energy and Minerals Management
Subactivity: Fluid Energy Minerals

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) from Base
Oil and Gas	$	44,545	42,630	44,349	46,519	+2,170
	(FTE-T)	(1,210)		(1,210)	(1,188)	(-22)
Geothermal	$	2,758	2,639	2,755	2,475	-280
	(FTE-T)	(61)		(61)	(55)	(-6)
Total Requirements	$	47,303	45,269	47,104	48,994	+1,890
	(FTE-T)	(1,271)		(1,271)	(1,243)	(-28)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Fluid Energy Minerals	47,303	-2,034	45,269

This reduction will be accomplished by deferring hiring for most positions vacated during 1986 and by not initiating any planned program expansion over the 1985 level of capability. The effect of these actions will be to curtail effort in certain Bureau-initiated workload areas (e.g., KGS and drainage determinations, inspections not associated with FOGRMA, Indian diligence reviews, inspections of abandoned wells) in favor of maintaining, within presently established timeframes, the response to public demand work, such as approval of APD's and other operator proposals. Additional savings will be generated through deferral of some inspection and enforcement training and postponement of planned equipment purchases which would have substantially reduced our long-term computer and telecommunications use charges and increased the productivity of inspectors.

Authorization

30 U.S.C. 181 et seq. P.L. 66-146	The Mineral Leasing Act of 1920, as amended, provides for leasing of coal, oil and gas, oil shale, phosphate, sodium, potassium, and gilsonite on the Federal public domain.
30 U.S.C. 351-359	The Acquired Lands Mineral Leasing Act of 1947 provides for leasing of all minerals on acquired lands.

30 U.S.C. 1701 P.L. 97-451	The Federal Oil and Gas Royalty Management Act of 1982 is a comprehensive law dealing with royalty management on Federal and Indian leases and includes, in addition to its revenue accountability requirements, provisions pertaining to: onshore field operations; inspections; cooperation with the States and Indian tribes; duties of lessees and other lease interest owners, transporters and purchasers of oil and gas; and reinstatement of onshore leases terminated by operation of law.
30 U.S.C. 1001 P.L. 91-581	The Geothermal Steam Act of 1970 authorizes the Secretary to issue leases for the development of geothermal resources.
25 U.S.C. 2101-2107 P.L. 97-382	The Indian Mineral Development Act of 1982 permits Indian tribes and allottees to enter into agreements other than conventional leases for the disposition of mineral resources which require the Secretary to provide technical advice during negotiation and development, approval and oversight thereafter.
42 U.S.C. 4321, 4331-4335, 4341-4347	The National Environmental Policy Act of 1969 requires preparation of environmental impact statements for Federal projects having a significant effect on the environment.
43 U.S.C. 1711 P.L. 94-579	The Federal Land Policy and Management Act of 1976 provides for the preparation and maintenance of inventories of public land resource values (section 201(a)).
43 U.S.C. 31(a)	The Act of March 3, 1879, as amended, provides for the inventory and classification of minerals on Federal lands.
60 Stat. 1099	Section 402 of Reorganization Plan No. 3 of 1946 transferred mineral leasing functions from the Secretary of Agriculture to the Secretary of the Interior for certain acquired lands.
25 U.S.C. 396	The Act of March 3, 1909, as amended, provides that all lands allotted to Indians may be leased for mining purposes as deemed advisable by the Secretary of the Interior and authorizes the Secretary to perform any and all acts and make such rules and regulations as may be necessary to carry out the provisions of the Act.
25 U.S.C. 396(a)	The Act of May 11, 1938 provides for equivalent actions in leasing unallotted (tribal) Indian lands.

OIL AND GAS

Objectives

The major objectives of the oil and gas program are to:

- Classify Federal lands on the basis of their oil and gas potential and evaluate specific tracts being considered for leasing or proposed for transfer;
- Conduct an expanded competitive leasing program as a result of an accelerated known geological structure (KGS) determination program;
- Make land available for oil and gas development by issuing noncompetitive leases through the over-the-counter (OTC) and simultaneous (SOG) filing methods and by processing notices of intent (NOI's) to conduct geophysical exploration, applications for permits to drill (APD's) and associated rights-of-way actions within 30 days of receipt;
- Complete processing of noncompetitive OTC offers to lease on BLM lands within four months of receipt (i.e., allow no backlog to develop);
- Process lease assignments within 90 days of receipt;
- Process promptly the advance rentals submitted as part of the SOG application requirements;
- Continue to participate in the Bureau effort to automate Federal land status and fluid minerals case records to enhance BLM's land management capabilities and to provide faster and more reliable service and information to the public;
- Work with other surface management agencies to ensure the timely processing of oil and gas lease applications awaiting action;
- Approve the on-site operations of lessees to ensure that operations are consistent with sound practices for the conservation of the mineral resource and necessary protection of the environment and other resources;
- Review and act on proposals related to oil and gas operations such as unitization, communization and gas storage agreements;
- Conduct, on the basis of established priorities, on-site inspections of drilling, production, and surface protection operations to ensure environmental protection, safe and workmanlike operations, conservation of the resource, and receipt of proper revenues due to Federal and State governments, Indian tribes and allottees;
- Perform Natural Gas Policy Act (NGPA) category determinations for Federal and Indian leases to establish the differentiation required by NGPA regulations;
- Conduct drainage protection reviews and analyses on Federal and Indian lands (which may involve requiring operators to drill protective wells and/or to pay compensatory royalty);

- Monitor diligent development on producing, but not yet fully developed, Indian leases to ensure that appropriate actions on leases and development contracts are occurring in a timely fashion;

- Conduct economic and policy analyses related to oil and gas leasing and lease administration; and

- Provide economic and resource value determinations for non-lease ventures in response to specific tribal or individual Indian allottee requests.

Base program

Base funding for the oil and gas program is $44,349,000 and 1,210 FTE. Certain aspects of the leasing portion of this program are presently under review by the Secretary and the Congress. However, at this time, the budget assumes that no major change will take place; and the descriptions herein represent the current program.

The onshore oil and gas program is one of the major mineral leasing programs in the Department. Currently there are about 117,000 existing leases on Federal lands covering about 126 million acres, of which about 17,000 leases are in producing status. The program is also responsible for over 14,000 existing leases on Indian lands (about 4,000 producing) as well as advising Indian tribes and allottees on leasing matters. Revenues generated by Federal oil and gas leases are expected to exceed $1 billion in 1987.

The proven oil reserves in the United States amount to 35 billion barrels. Based on production, onshore Federal and Indian lands account for an estimated 5 percent of these proven reserves. Total remaining recoverable gas reserves in the United States are estimated at 206 trillion cubic feet. Based on production, an estimated 6.6 percent of these proven reserves are on onshore Federal and Indian lands. The rate of growth in the number of new Federal and Indian wells in production has been between 3 and 5 percent per year for the past 25 years. The number of active leases and acres under lease has grown by about 40 percent over the past 5 years. Even during the 1982-83 nationwide drilling slump, drilling applications on Federal lands declined by less than half the national rate and are now increasing. As the number of producing wells increases, there is a corresponding increase in BLM's field work associated with post-lease activities.

Leasing Systems and Pre-Lease Workload - Oil and gas leasing is done under both competitive and noncompetitive procedures. Competitive leasing takes place for those lands designated as known geological structures (KGS's) in the Continental United States and as favorable petroleum geological provinces (FPGP's) in Alaska and in the National Petroleum Reserve - Alaska (NPR-A). Noncompetitive leases are initially issued to the first qualified applicant for lands that have not been previously leased and that are not in either a KGS or FPGP. These are referred to as over-the-counter (OTC) leases. For lands that have been previously leased and are still not in a KGS or FPGP, new noncompetitive leases, referred to as simultaneous oil and gas (SOG) leases, are issued after a simultaneous filing period. All SOG drawings are conducted by BLM's Wyoming State Office using a computerized, random selection drawing system. Lands which are offered but receive no SOG applications are then available for OTC leasing. This accounts for the increase in OTC leases expected in 1987. Receipts from SOG filing fees are estimated to be $30 million in 1986 and 1987. Filing fees are collected by BLM and deposited directly into the General Fund of the Treasury.

Due to the high levels of leasing in the 1980-1983 period, the leasing workload has shifted away from a large volume of OTC leases toward greater emphasis on SOG and competitive leasing. The increase in competitive leasing will have only marginal impact on lease totals because some potential SOG parcels will contain some KGS lands, but the remainder of the parcel will be offered through the SOG process. Because of the larger acreage involved in many of the SOG leases, the acreage leased will not decrease significantly.

In 1980, a regulatory change was made which increased the maximum size of the area covered by a noncompetitive lease from 2,560 acres to 10,240 acres; consequently, the average size of the area for noncompetitive leases increased from 1,100 acres in 1980 to about 1,600 acres in 1985. In 1983, nearly 12,000 leases were issued covering 20 million acres; and the backlog of OTC applica- tions for leases on BLM land was eliminated. In 1985, nearly 8,400 noncompetitive leases were issued covering 13.4 million acres. Competitive leases can encompass up to 640 acres in the Continental United States, up to 2,500 acres in non-North Slope Alaska, and up to 60,000 acres in the NPR-A.

Pre-lease activities include issuing permits for geophysical exploration, conducting reservoir management to identify KGS's, making recommendations on the resource value of onshore oil and gas lands to be offered for competitive leasing, exchange, or conveyance; determining adequacy of bids submitted in competitive sales; adjudicating lease offers which may not comply with leasing regulations; and issuing leases. NEPA compliance is an integral part of the pre-lease workload. Although the intensity of NEPA compliance is under judicial review, this budget assumes that there will be no change in NEPA procedures affecting the oil and gas program during 1986 or 1987.

The oil and gas program generates receipts from filing fees, bonuses, rentals and royalty payments. All receipts from leasing (except filing fees) are divided among the Treasury, the Reclamation Fund, and the States in which the leased lands are located. In 1984, MMS became the agency responsible for collecting, accounting for, and distributing all onshore mineral receipts (except first-year rentals and filing fees which continue to be collected by BLM). The lease operation, approval and inspection functions performed by BLM on all producing Federal and Indian leases are an important element in ensuring that proper royalty payments are made. A part of this function involves the validation of actual lease production payments.

The oil and gas leasing program is dependent on timely and accurate KGS determinations. Prior to issuance of each noncompetitive lease, BLM must determine that the lands covered under the lease application are not within a KGS. Review and update of past classification actions must incorporate successful well completions whether or not they occur on Federal land.

On October 12, 1983, the issuance of leases through the SOG system was suspended. The decision to suspend leasing was prompted by a discovery that lands which should have been designated within a KGS were included in an SOG lease offering. As part of an overall program to improve reservoir management of Federal oil and gas resources, the Bureau has taken corrective actions to ensure that no noncompetitive leases issued are within KGS's. If the existence or absence of a KGS within the boundaries of the parcel is uncertain, the parcel will not be offered at all until a final determination is made. The Bureau has increased its use of geologic information and analysis and provided additional employee training to ensure improved reservoir management.

Post-Lease Work - After a lease is issued, certain post-lease functions are required in order that the lessee may utilize the rights conveyed by the lease. Leases issued result in lease assignments, unit agreements, APD's, and other operator proposals. Successful exploration increases post-lease workload by requiring review of additional development plans, performance of periodic inspections, enforcement actions when inspections reveal failure to comply with all applicable requirements, and reservoir management activity to identify potential and actual drainage of Federal or Indian oil and gas. Each year, the post-lease workload associated with both producing and nonproducing leases grows. While leasing is a discretionary action, post-lease actions are, by and large, mandatory workloads to ensure compliance with the lease terms, to protect the other resources present, and to permit the lessee to utilize the rights contained in the lease.

Indian Lands - The Base program also funds the completion of certain actions on Indian lands. The BLM role prior to lease sale on Indian lands is advisory. While BLM may make recommendations concerning economic and resource evaluation matters, pre-sale activities are carried out almost exclusively by BIA and the Indian tribes. When requested, BLM provides recommendations as to high bid acceptability. BLM's role on Indian lands increases after a lease is issued and exploration, development, and production take place. Post-lease operations are approved and supervised by BLM, usually with full tribal authority for approval of development and/or notification of noncompliance to the operator. Other determinations (e.g., recommendations concerning lost oil and gas royalties) are normally accepted, but tribes retain the right to make their own decisions. Diligent development reviews of all producing but not fully developed Indian leases are conducted by BLM. These reviews entail an analysis of the development and production plans of the operator to ensure that wells are drilled on a periodic basis until the lease has been fully developed. Inspection and enforcement work is conducted by BLM on Indian land leases except where cooperative agreements with tribes are in place.

Inspection and Enforcement (I&E) - The Federal Oil and Gas Royalty Management Act (FOGRMA) of 1982, requires the Secretary to "enforce effectively and uniformly existing regulations under the mineral leasing laws providing for inspection of production activities on lease sites on Federal and Indian Lands." FOGRMA directs the Secretary to establish: (1) a comprehensive inspection system, (2) procedures to ensure inspection at least annually of each lease site producing or expected to produce significant quantities of oil or gas, or which has a history of noncompliance with laws or regulations, and (3) adequate training programs for inspectors. In addition, the Secretary has adopted the following recommendations of the Commission on Fiscal Accountability of the Nation's Energy Resources: (1) develop and implement an inspection and enforcement strategy to ensure lessee compliance, (2) increase the number of inspectors to ensure site security and production verification, (3) provide fair but firm enforcement when violations are found, (4) impose civil penalties for violations, and (5) monitor inspection and enforcement activities. The Bureau has implemented an inspection and enforcement program which responds to and implements these directives and continues to provide leadership in this area.

In response to the Act, an oil and gas inspection and enforcement strategy has been designed to make the most efficient use of available Federal personnel and funding. This strategy involves establishing priorities and eliminating redundancies through the use of statistical sampling methods and cooperative agreements with States, Indian tribes, and other surface-managing agencies. The criteria to be used in establishing priorities include the following: potential for significant revenue losses; operator compliance profiles; potential for significant environmental degradation or hazard to health and safety or to other natural resources such as fresh water or coal; and legal, regulatory or other mandatory requirements for inspection, e.g., pre-drilling inspection needed for approval of an APD. Inspections will also be scheduled in response to specific requests from MMS's royalty management staff. The workload in inspections of producing leases increases each year by the 3 to 5 percent annual growth in the number of leases in production.

In addition to production inspections mandated by FOGRMA, the Bureau will conduct approximately 20,000 drilling, abandonment and other inspections in 1987 required by regulations under the mineral leasing acts. These inspections are necessary to ensure that lessees are in compliance with regulations, orders, lease terms and approved plans. For example, drilling inspections ensure that: (1) blow-out prevention equipment is properly in place, (2) H_2S contingency plans and other safety requirements are observed, (3) fresh water aquifers are protected by proper plugging and cementing, and (4) mineral resources such as coal and potash are protected.

Bureau inspectors also witness the abandonment of operations; actions which can occur at any time of the day or night including weekends. Bureau presence is often necessary to ensure proper plugging and cementing of wells. Bond release activities such as proper reclamation and environmental protection also require a Bureau presence.

Drainage Reviews - A potential drainage situation exists when a producing well is withdrawing oil and/or gas from beneath adjacent Federal or Indian lands (leased or unleased) whenever that well is located on: (1) State or privately owned lands, (2) Federal or Indian lands where the revenues from the well are distributed differently from those of the adjacent Federal or Indian acreage, or (3) Federal or Indian lands which are subject to a lower royalty rate than that of adjacent Federal or Indian lands.

Every Federal and Indian lease incorporates the requirement that the lessee drill all wells necessary to protect the leased lands from drainage or, with the consent of the Secretary, to compensate the lessor in full each month for the estimated loss of royalty through drainage in the amount determined by the Secretary. Where the drained acreage is unleased, the Secretary, when allowed by law or regulation, may offer the lands for competitive lease or may seek a compensatory agreement with the owner of the offending well. Thus, if the unleased lands are Federal and are not within a KGS, a KGS must be established or an existing KGS expanded to include the acreage in question.

To determine whether potential drainage exists, the Bureau must screen approximately 50,000 well completions in the U.S. each year to determine whether potential drainage situations have been created. It is estimated that some 6,000 cases will be identified as potential drainage situations each year and, ultimately, that about 250 of these may result in a determination of actual drainage. If the potential exists, the Bureau must notify the Federal/Indian lessee and request a plan for protecting the lease (e.g., by drilling a well) or information detailing the engineering, geological, and economic rationale to support the contention that drainage is not occurring or that an economic well could not be drilled. Upon review of the plans, the Bureau may decide to conduct an engineering analysis of the potentially offending well to determine whether drainage is actually occurring.

The base program also includes funding to improve program analysis across the entire spectrum of BLM energy resources management. Economic, policy, and resource assessment analyses of complex leases are performed including the determination of the energy resource base existing on public lands, modification of procedures for identifying the resources available for development, analysis of the systems under which resources are or should be offered for lease or sale, and evaluation of the conditions under which development occurs.

Increase from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	64,349	66,519	+2,170
(FTE-T)	(1,210)	(1,188)	(-22)

A total increase of $2,170,000 and a decrease of 22 FTE are requested for 1987. The change is composed of the following:

Lease Adjustments (+$300,000 and +5 FTE)

An additional $300,000 and 5 FTE are needed for processing oil and gas lease assignments. Beginning in 1981, the number of requests for approval of assignments increased by approximately 67 percent. This sudden and sustained increase in workload resulted in a backlog of assignment applications that BLM has not been able to eliminate.

Before BLM can grant approval for a permit to drill for oil and gas, the record of title must be clear and any assignment of operating rights approved as required by law. The large backlog of assignments awaiting approval (currently approximately 25,000) stifles the transfer of leases into the hands of those most likely to develop them and may delay drilling and production of oil and gas.

BLM's Wyoming State Office has a particularly large backlog of assignments (approximately 13,000) as a result of high oil and gas development activity. The proposed increase would be principally directed to Wyoming.

Indian Diligence Reviews (+$800,000 and +15 FTE)

The review of all producing but not fully developed Indian leases requires increased funding in 1987, principally in New Mexico, but also in Utah and Montana. These reviews are not the same as the inspections conducted for the purpose of ensuring compliance with operational requirements pursuant to FOGRMA. Diligent development reviews of Indian leases require a full, detailed analysis of the exploration and development which has occurred to date, the identification of undeveloped spacing units, and an analysis of the operator's plans for the future year to determine whether prudent diligent development will result. In some instances, the operator may be required to drill a well or wells to satisfy this standard. The work is highly technical, and petroleum engineer/geologist skills are required.

During 1985 BLM conducted a survey to determine the appropriate approach to these reviews. The results indicate that each such review requires an average of 35 hours to complete, which may be understated for any case requiring the

Bureau to compel additional drilling. Based on 35 hours per review, current staffing would permit the Bureau to review 900 of the approximately 2,800 Indian leases in this category on an annual basis. With the requested increase, the Bureau could perform approximately 1,800 such reviews each year. Thus, we would be able to complete these development reviews on about a 2 to 3-year cycle in New Mexico and on an annual or biennial basis elsewhere.

Inspection and Enforcement (+$1,070,000 and -42 FTE)

The requested funding for inspection and enforcement will permit the completion of all of the high priority inspections required by the Federal Oil and Gas Royalty Management Act (FOGRMA) of 1982. Previously, funding and personnel constraints limited our capability for inspections to about 90 percent of the high priority leases annually. In addition, the requested funding will permit the Bureau to improve the automated Onshore Oil and Gas Lease Inventory and Inspection System (MS-1) which will substantially increase the productivity of the Bureau's inspectors. The result of these actions will be the completion of an additional 3,000 high priority inspections at the 1987 Estimate level.

Also, with this increase the Bureau will begin implementation of the authority provided in section 205 of FOGRMA to delegate to State governments inspection authority for oil and gas leases on Federal and Indian lands. Such delegations would be accomplished by written agreements between the States and the BLM. It is anticipated that the Bureau would provide funding to the States for the cost of conducting an inspection program on Federal leases and would provide technical support and training to the delegated States. California, Utah and Wyoming may be States to which this authority will be delegated in 1987. The currently authorized BLM inspector force in these 3 States is 55 FTE. BLM anticipates reducing the inspector force in these States by 42 FTE under the proposed delegation agreements, retaining 13 FTE to perform oversight functions in addition to their other regular inspection workload. The combined efforts of the BLM and State inspector workforce would accomplish 100 percent of the FOGRMA required high priority inspections in these States.

Oil and Gas Workload Accomplishments

The planned workload accomplishments at the Base and Estimate funding levels are as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Inventory (000's acres)	1,480	1,480	1,480	1,480	---
Plan amendments (# completed)	7	12	11	11	---
EIS's (# completed)	10	7	6	6	---
Pre-lease notices/permits (# processed)	3,400	3,400	3,350	3,350	---
Over-the-counter leases (# applications processed)	7,300	8,360	8,660	8,660	---
Classifications (# actions)	1,200	1,300	1,400	1,400	---
SOG leases (# parcels posted)	13,000	15,000	16,600	16,600	---
(# leases issued)	7,800	9,000	9,600	9,600	---
Competitive leasing (# tracts offered)	1,500	1,700	2,000	2,000	---
Lease adjustments (# processed)	42,000	50,000	50,000	56,000	+6.000
Lease operations (# APD's processed)	4,000	4,300	4,300	4,600	+300
Unitization and communization (# actions processed)	3,000	3,000	2,500	2,500	---
Drainage reviews (# reviews completed)	3,700	4,000	4,000	4,000	---
Inspection and enforcement (# of inspections)	25,000	28,000	28,000	31,000	+3,000

Distribution of change by object class

The object class detail for the proposed increase of $2,170,000 is as follows:

	FTE	Amount
Personnel compensation	-22	-$ 600,000
Personnel benefits		-96,000
Travel and transportation of persons		-40,000
Transportation of things		-30,000
Printing and reproduction		+20,000
Other services		+2,816,000
Supplies and materials		+50,000
Equipment		+50,000
Total		+$2,170,000

GEOTHERMAL

Objectives

The major objectives of the geothermal program are to:

- Evaluate geothermal resources of tracts to be offered for competitive leasing, review known geothermal resource area (KGRA) classifications, and offer unleased KGRA lands at competitive lease sales;

- Respond to exploration, development and production proposals in accordance with timeframes contained in the December 1981 BLM/GS/FS interagency agreement for the geothermal program and the June 1984 BLM/FS interagency agreement for mineral leasing;

- Process noncompetitive lease applications for BLM-administered lands within 90 days of receipt and make lands in relinquished leases available for new applications within 90 days of relinquishment;

- Conduct production verifications and inspections of geothermal operations on Federal lands; and

- Approve and supervise industry operations on Federal geothermal leases.

Base program

Base funding for the geothermal program is $2,755,000 and 61 FTE.

Federal lands contain about 60 percent of the known or prospective geothermal resource areas of the United States. Given favorable market conditions, the estimated annual electrical generation potential from Federal geothermal resources is 2,500 megawatts by the year 2000, or the equivalent of about 100,000 barrels of oil per day. In addition, direct thermal use applications (crop drying, gasohol production, etc.) could replace the equivalent of 10,000 more barrels of oil per day by the year 2000. As of April 1985, over 1,300 Federal geothermal leases were in effect covering over 2.2 million acres. These numbers could be expected to increase if statutory limits on acreage holdings are increased.

Geothermal leasing is done under both competitive and noncompetitive procedures. Lands designated as KGRA's are leased competitively. Noncompetitive leases are issued to the first qualified applicant for lands available for leasing and not designated as a KGRA.

Under the old law, a geothermal lessee was limited to holding a maximum of 20,480 acres per State. This limitation was universally criticized as a constraint on the rate of geothermal resource exploration and development and as a deterrent to industry participation in the Federal leasing program. Effective December 26, 1985, the Secretary is exercising the authority to allow a single lessee to hold up to 51,200 acres in a State.

The Bureau also has the responsibility of approving and supervising operations on Federal geothermal leases. This responsibility includes review and approval of all proposed geothermal exploration, development, production, and utilization plans and inspections of all operations to ensure compliance with all conservation and environmental standards.

During 1984 and 1985, program emphasis was on the authorization of post-lease exploration and development proposals, holding KGRA sales, processing new lease applications, and making previously leased lands available for re-leasing.

Workload requirements have shifted from pre-lease, inventory and GEM assessments to post-lease work related to issuing utilization licenses and assignments. Also, a decrease in the number of leases issued is expected in 1987.

Decrease from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	2,755	2,475	-280
(FTE-T)	(61)	(55)	(-6)

The decrease of $280,000 and 6 FTE is made possible because the costs associated with NEPA compliance will continue to decline due to (1) elimination of the backlog of lease applications on BLM lands and (2) completion of NEPA work during 1985 and 1986 on Forest Service lands where BLM assistance was requesed. Following the 1985 and 1986 geothermal resource data collection for the areas in Klamath County, Oregon, demand for inventory is also expected to decrease.

The geothermal program has matured, and the inspection level is expected to remain stable. Geothermal lease adjustments will be given priority when operating and exploration activities depend on the adjustments. Because of reduced program activity, the Bureau can meet its anticipated program responsibilities at the proposed lower funding level.

The anticipated workload for the geothermal program is as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-)
Inventory (000's acres)	100	130	100	10	-90
Environmental statements (#)	---	1	1	---	-1
Pre-lease notices/permits (#)	240	240	200	200	---
Noncompetitive lease applications (# processed)	550	540	540	400	-140
Classifications (# of actions)	---	4	4	4	---
Competitive leases (# offered)	120	130	130	100	-30
Lease adjustments (# processed)	375	325	300	300	---
Lease operations (# well applns. processed)	200	200	200	200	---
Unitization and communization licenses (# processed)	20	19	19	10	-9
Inspection and enforcement (# inspections)	800	700	700	700	---

Distribution of change by object class

The object class detail for the proposed decrease of $280,000 is as follows:

	FTE	Amount
Personnel compensation	6	$165,000
Personnel benefits		30,000
Travel and transportation of persons		25,000
Transportation of things		20,000
Communications, utilities and miscellaneous charges		10,000
Other services		20,000
Supplies and materials		10,000
Total		$280,000

Justification of Program and Performance

Activity: Energy and Minerals Management
Subactivity: Solid Energy Minerals

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
	$	19,338	18,506	19,278	13,695	-5,583
Coal	(FTE-T)	(320)		(320)	(280)	(-40)
Oil Shale and	$	2,098	2,008	2,098	---	-2,098
Tar Sands	(FTE-T)	(35)		(35)	(---)	(-35)
Total	$	21,436	20,514	21,376	13,695	-7,681
Requirements	(FTE-T)	(355)		(355)	(280)	(-75)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Solid Energy Minerals	21,436	-922	20,514

Because of the suspension of regional coal leasing activities over the past 2 years during the Department's coal leasing program review, no additional tracts have been delineated since 1984. As a result, the need for coal drilling to fill data gaps on tracts nominated for lease sale is extremely small in 1986 and will be reduced significantly from the level originally planned for 1986. Also, the workload associated with processing of coal preference right lease applications (PRLA's) is less than planned 1986 levels due to the declining interest exhibited by most applicants in pursuing the processing of their lease applications. These two factors, plus the reduction in industry interest in oil shale and tar sands leasing, create reduced requirements which can be used to accommodate the P.L. 99-177 budget reduction.

Authorization

30 U.S.C. 181 *et seq.* P.L. 94-579	The Mineral Leasing Act of 1920, as amended, provides for leasing of coal, oil and gas, oil shale, phosphate, sodium, potassium, and gilsonite on the Federal public domain.
42 U.S.C. 4321, 4331-4335, 4341-4347	The National Environmental Policy Act of 1969 requires preparation of environmental impact statements for Federal projects having a significant effect on the environment.
43 U.S.C. 1711 P.L. 94-579	The Federal Land Policy and Management Act of 1976 provides for the preparation and maintenance of an inventory of public land resource values (Section 201(a)).

P.L. 94-377	The Federal Coal Leasing Amendments Act of 1976 requires competitive leasing of coal on public lands.
30 U.S.C. 351-359	The Acquired Lands Mineral Leasing Act of 1947 provides for leasing of all minerals on acquired lands.
43 U.S.C. 31(a)	The Act of March 3, 1879, as amended, provides for the inventory and classification of minerals on Federal lands.
60 Stat. 1099	Section 402 of Reorganization Plan No. 3 of 1946 transferred mineral leasing functions from the Secretary of Agriculture to the Secretary of the Interior for certain acquired lands.
25 U.S.C. 396	The Act of March 3, 1909, as amended, provides that all lands allotted to Indians may be leased for mining purposes as deemed advisable by the Secretary of the Interior and authorizes the Secretary to perform any and all acts and make such rules and regulations as may be necessary to carry out the provisions of the Act.
25 U.S.C. 396(a)	The Act of May 11, 1938, provides for equivalent actions in leasing unallotted (tribal) Indian lands.
25 U.S.C. 2101-2107 P.L. 97-382	The Indian Mineral Development Act of 1982 permits Indian tribes and allottees to enter into agreements other than conventional leases for the disposition of mineral resources which requires the Secretary, through BLM, to provide technical advice during negotiation and development, approval and oversight thereafter.

COAL

Objectives

The objectives of the coal program are to:

- Maintain an orderly process to provide for the leasing of Federal coal in designated Federal coal production regions, including:
    - Continuation of the regional coal team (RCT) process for setting long-range coal leasing schedules, for reviewing the adequacy of data for decisionmaking, for reviewing land-use planning data, and for guiding regional activity planning, particularly the preparation of regional coal environmental impact statements (EIS's), in designated Federal coal production regions.
    - Meeting short-term coal needs by expeditiously processing emergency coal lease applications for production maintenance and preventing the bypass of Federal coal.
    - Ensuring program responsiveness to market conditions by using market analyses in the coal activity planning process.

- Continue processing outstanding coal preference right lease applications (PRLA's) upon the request of applicants except where processing is prohibited by law.

- Process lease applications for coal outside of designated activity planning regions.

- Ensure adequacy of Federal coal and other resources data for coal land-use and activity planning, for coal lease applications, and for determining possible lease stipulations.

- Ensure timely gathering of resource information from private industry drilling by expeditiously processing coal exploration licenses.

- Conduct Federal coal drilling when necessary to "fill-in" areas having information gaps from previous private industry and government drilling.

- Process all coal lease readjustments, royalty reductions and logical mining unit (LMU) applications on a timely basis.

- Conduct inspection and enforcement and production verification on Federal and Indian lands in accordance with applicable statutes, regulations, policies, and guidelines.

- Review, approve, and inspect industry operations related to coal exploration, development and production on Federal and Indian lands.

- Monitor leases for achievement of diligent development and continued operation and ensure a nationally consistent approach to all legal and regulatory responsibilities.

- Provide technical assistance to Indian tribes and BIA on coal program matters.

Base program

Base funding for the coal program is $19,278,000 and 320 FTE-T.

BLM manages about 33 percent of all coal in the United States and indirectly affects the use of at least an additional 10 percent. As of September 30, 1985, there were 618 Federal coal leases covering 918,861 acres of Federal lands and private lands with Federal subsurface ownership with an estimated 17.6 billion tons of recoverable reserves. There were 127 producing Federal leases in 1985. Production from those leases (162.2 million tons) amounted to 19 percent of total United States production. Coal production from Federal lands has increased from 12 million tons in 1970 to the 1985 level. Federal royalties collected by the Department, with production verified by BLM, totalled $104.6 million in 1985.

The Bureau's Federal coal management activities fall into two broad categories. These are: (A) Coal Leasing, which involves reaching decisions to offer Federal coal for lease sale; and (B) Coal Operations, which includes all actions taken after the issuance of a license or lease. The leasing program is a discretionary program with specific regulatory requirements necessary before the holding of a sale or issuance of a lease. The coal operations program is designed to meet the statutory and regulatory requirements related to active and inactive licenses and leases. A shift in the emphasis of the Federal coal management program from coal leasing to coal operations has occurred, in part, because of the gradual maturing of coal leases and some increase in the number of producing leases, but primarily due to the 10-year anniversary of the Federal Coal Leasing Amendments Act (FCLAA) of 1976 and associated requirements such as diligence and lease readjustment.

BLM expects to devote a larger percent of its Base program funding to coal operations in 1987. This continues a shift toward operations and away from leasing which began in 1985. The Bureau, in the Federal Oil and Gas Royalty Management Act (FOGRMA) section 303 report, committed itself to an expanded role in inspection, enforcement and production verification.

A. Coal Leasing

In response to the 1984 reports by the Commission on Fair Market Value Policy for Federal Coal Leasing (Linowes Commission) and by the Office of Technology Assessment (OTA), the Department studied numerous program revisions in 1984 and 1985. One primary revision was to delegate to the regional coal teams (RCT's) the responsibility for reviewing leasing levels, land use plans and activity plans, and the development of long-range coal planning schedules. Activity planning in the coal production regions will take place with identified demand for additional regional leasing consistent with the long-range planning schedules. RCT leasing recommendations will be based on input determined by current market analyses conducted by BLM.

Activities such as leasing by application for both emergency leasing and leasing outside coal production regions, processing PRLA's, and evaluating existing land use and activity plans are conducted using revised appraisal procedures and sale techniques where appropriate. Other continuing activities include the issuance of coal exploration licenses and lease modifications.

The Department encourages private industry to perform drilling to gather additional resource information. Federally-conducted coal drilling is intended to complement data gathered by private industry drilling to "fill-in" locations having information gaps. The program emphasis is on improving data adequacy for future land use and activity planning, meeting National Environmental Policy Act (NEPA) mandates, and enhancing market analysis procedures. All accumulated data are used to evaluate coal quality, quantity, and other subsurface resource information. Since no new regional leasing tracts have been delineated since 1984 and needed Federal coal drilling on these tracts was conducted in 1985 and 1986, no Federal coal drilling is planned for 1987. However, drilling could be resumed when additional needs are identified.

In 1985, the Department prepared a supplement to the 1979 Federal Coal Management Program EIS. The supplement was prepared because the conditions that formed the basis of the 1979 analysis have changed and because numerous changes had been made or proposed in the program since 1979. Following completion of the EIS supplement, the Secretary decided to retain the existing program, as revised, and to adopt most of the program revisions proposed in response to the Commission on Fair Market Value Policy for Federal Coal Leasing and the Office of Technology Assessment. The 1987 Base program will continue the new coal leasing procedures adopted for 1986. Because basic coal information is required to arrive at leasing decisions, portions of the base program will be directed toward improving data for coal land use and activity planning.

In 1986, the Department revised its policies and procedures for processing coal PRLA's to improve the quality of EIS's prepared for PRLA's and provide for public review of and comments on the kinds and costs of mitigation measures for anticipated environmental impacts associated with mining on the PRLA areas. This cost information is used to help determine whether applicants have discovered coal in commercial quantities and, thus, are entitled to preference right leases. Where not prohibited by legal restrictions, the BLM resumed the processing of PRLA's in 1986 using the revised policies and procedures. The processing of PRLA's in 1987 will concentrate on those applications held by applicants who request expedited resolution, so that action can be taken on those applications with the most immediate prospects of development if leases are issued.

B. Coal Operations

The coal operations program includes all activities which occur after the issuance of a license or lease.

BLM is responsible for administering the mineral leasing laws with respect to coal development and production, resource recovery, and protection on Federal coal leases and licenses. The Office of Surface Mining (OSM) and the counterpart State agencies are responsible for administering the Surface Mining Control and Reclamation Act (SMCRA) of 1977 and its associated reclamation requirements. BLM is also responsible for coal operations on Indian tribal and allotted lands. Where intermingled Federal, Indian and private coal ownerships are in the same operation, the workload is significantly increased in order to accomplish the operational requirements of 43 CFR 3480, which contains the provisions related to coal exploration and development.

The FCLAA mandated a major Federal coal operations program. The regulations published in 1979 and 1982 clarified the Bureau's responsibilities with respect to coal operations. In 1987 there will be a significant increase in the number of Federal coal leases subject to certain FCLAA provisions (43 CFR 3480) because the Act provided that leases issued prior to August 1976 had an additional 10 years before readjustment. This includes all workload elements associated with field verification of compliance with applicable laws, regulations, terms and conditions of approved leases, licenses and permits, and plans for exploration, mining, reclamation, resource recovery and protection, and abandonment.

During 1985 and 1986, 93 Federal coal leases will be readjusted to require compliance with the FCLAA. This will bring the total number of leases subject to FCLAA to 381 in 1987. An additional 69 leases will be readjusted to comply with the FCLAA during 1987. Since readjustments occur on the 20-year anniversary dates of these leases, the operations workload will continue to increase in order to ensure statutory and regulatory compliance, even if few new leases are issued.

FEDERAL LEASE OPERATIONS WORKLOADS

Year	Leases Issued	Leases Readjusted or Modified	Leases Subject to FCLAA
1976-81	46	53	99
1982	41	44	184
1983	21	37	242
1984	5	41	288
1985	N/A	43	331
1986	N/A	50	381
1987	N/A	69	450

Operations activities on nonproducing leases fall into two general categories based on the status of the lease relative to FCLAA. Pre-FCLAA leases are not subject to the diligence requirements of FCLAA until readjustment or modification. For these leases, the operations workload centers around an annual on-the-ground inspection of each level to determine if any unauthorized activities (drilling, exploration, or production) are occurring. Authorized activities which fall short of actual production (e.g., exploration, baseline environmental work, etc.) and which occur in compliance with the approved plans are inspected more frequently.

The second category of nonproducing leases are those which have been issued, readjusted, or modified since the enactment of FCLAA. These require a significant additional work effort. Recoverable reserves must be determined based on analysis of data supplied by the operator/lessee so that the commercial quantities amount (1 percent of recoverable reserves, by regulation) can be established for diligence purposes. Leases may be consolidated in LMU's, and such LMU formations are anticipated to continue in 1986 and 1987. The FCLAA also requires the submittal of a resource recovery and protection plan (R2P2) within 3 years of lease issuance or readjustment after August 4, 1976. Because of these requirements, nonproducing leases generate a workload as large as producing leases.

Prior to the commencement of mining operations, the operators/lessees may conduct additional exploration in order to clearly define the coal resource and to determine the mining methods and sequence to be used. This is authorized through the approval of an exploration permit. Prior to final mine plan approval, coordination occurs with MMS for royalty collection and with OSM for reclamation requirements. Coordination between BLM and the operators/lessees ensures that the final mining plan properly reflects the requirements of the Mineral Leasing Act (MLA) as amended by FCLAA, the operating regulations, and the lease terms and conditions, and that maximum economic recovery will be obtained pursuant to the approved plan of operations.

Inspection and enforcement activities provide for the verification of production to ensure that all revenues from producing Federal and Indian coal mines are accurately reported and that production is proceeding in accordance with the approved R2P2. The Bureau will continue to investigate instances of alleged coal trespass as a function of its coal lease inspection and enforcement responsibilities.

All producing and nonproducing leases are continually monitored with the lease data and statistics processed through the Solid Leasable Mineral System (SLMS) to ensure compliance with regulations and lease-term requirements and timely readjustments of the lease terms.

Decrease from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	19,278	13,695	-5,583
(FTE-T)	(320)	(280)	(-40)

A decrease of $5,583,000 and 40 FTE is proposed for 1987. The program can be reduced as a result of decreases in the number of regional activity plans and EIS's to be completed and in the number of PRLA's to be processed. Decreases are also expected in demand for emergency leasing, exploration licenses/permits, and classification evaluations. Regional coal activity plans and EIS's that were suspended when the coal program review began will be completed by 1987, and new rounds of regional coal activity planning are not expected to begin before 1988. Regional lease sales occurring in 1987 and 1988 would be based on the completed activity plans and EIS's, which should meet the projected demand for regional coal leasing during this period. PRLA processing in 1987 will concentrate on those applications for which processing is requested by the applicant. The 1987 Estimate reflects BLM's intention to devote a greater portion of its efforts to coal operations activities without affecting Federal coal leasing, and is adequate to support any changes implemented as a result of the Secretary's review of the program.

The estimated workload for the coal program is as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc.(+) or Dec.(-)
Inventory (000's acres)	330	330	330	130	-200
Plan amendments (# completed)	1	2	2	1	-1
EIS's	---	2	2	1	-1
Activity plans (# completed)	---	2	2	1	-1
Exploration licenses/permits (# processed)	234	285	285	250	-35
Noncompetitive leases (# PRLA's processed)	16	67	67	13	-54
Classifications and economic evaluations (# of actions)	140	160	160	140	-20
Competitive sales and leasing (# of sales)	2	21	21	8	-13
Lease adjustments (#)	376	636	636	636	---
Lease operations (# of plans processed)	2,400	2,917	2,917	3,000	+83
Inspection and enforcement (# of inspections)	2,400	5,096	5,096	5,096	---

Distribution of change by object class

The object class detail for the proposed decrease of $5,583,000 is as follows:

	FTE	Amount
Personnel compensation	40	$1,100,000
Personnel benefits		175,000
Travel and transportation of persons		100,000
Transportation of things		120,000
Printing and reproduction		60,000
Other services		3,948,000
Supplies and materials		50,000
Equipment		30,000
Total		$5,583,000

OIL SHALE AND TAR SANDS

Objectives

Due to a declining industry interest in the development of existing oil shale and tar sands leases and a total lack of demand for new lease offerings, the oil shale and tar sands program will be terminated in 1987. The program objectives for 1986 and the 1987 Base funding levels are as follows:

o Complete the processing and lease issuance for conversion of existing oil and gas leases in special tar sands areas to combined hydrocarbon leases and complete associated environmental analyses and EIS's;

o Ensure compliance with tar sands lease stipulations;

o Review oil shale minimum royalty production credits;

o Extend planning analysis to evaluate oil shale and tar sands resource values for cases involving disposal and exchange of lands; and

o Review, approve and inspect industry operations related to development and production on Federal lands.

Base program

The 1987 Base for the oil shale/tar sands program is $2,098,000 and 35 FTE.

Public lands in Colorado, Utah, and Wyoming contain the equivalent of about 2 trillion barrels of oil within the oil shale and tar sands reserves. These lands contain 80 percent of the Nation's oil shale and tar sands reserves with estimated recoverable reserves of 600 billion barrels of oil from oil shale, and 2-3 billion barrels of oil from tar sands.

BLM is responsible for supervising development operations on oil shale and tar sands leases. These responsibilities include engineering, environmental, and economic studies of operations on the existing oil shale leases and combined hydrocarbon leases, as required by the lease terms, and inspection of all operations on leased lands to ensure compliance with resource conservation and environmental standards.

Oil Shale

Section 20 of the Mineral Leasing Act of 1920, as amended, authorizes the Secretary of the Interior to lease Federal oil shale. This same authority served as the statutory basis for initiation and implementation of the current prototype oil shale program.

Of the four original prototype oil shale leases, the two tracts in Utah were relinquished by the lessee in December 1985. There are currently two prototype oil shale leases in effect in Colorado; however, the status of these two leases is expected to be reviewed by the lessee during 1986. The major workload elements in the prototype oil shale program include: compliance and inspection work on existing leases, processing modifications to operating plans, and coordination with State and local agencies.

Tar Sands

Major workload elements in the tar sands program include completing the last conversion applications for oil and gas leases and mining claims and required associated NEPA work. Also, classification and resource evaluation is required for determining the resource values of tracts to be offered for exchange or conveyance. This is accomplished by developing geologic, engineering, and economic information from data submitted by the lessees, acquired through field examination, or obtained from the Geological Survey or other Federal agencies.

Another element of the tar sands program is lease administration which includes bonding determinations, cancellations, terminations and relinquishments.

Decrease from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	[illegible]	---	-[illegible]
(FTE-P)	(33)	(---)	(-33)

Industry interest in the development of Federal oil shale and tar sands resources has declined in recognition of the ongoing technical difficulties associated with extracting oil from shale and also as a result of the current market conditions involving a surplus of oil. The Department has determined that the level of industry interest in these resources is no longer adequate to support the objectives of this program, and proposes to terminate the oil shale and tar sands program in 1987. This action will result in a savings of $[illegible] and 33 FTE from the base level.

The workload in the oil shale and tar sands program is estimated as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-)
Inventory (000's of acres)	[illegible]	[illegible]	[illegible]	---	-[illegible]
Plan amendments (#)	2	---	---	---	---
Environmental statements (# completed)	8	10	10	---	-10
Activity plans (#)	2	---	---	---	---
Exploration licenses/permits (# processed)	11	10	10	---	-10
Classifications and economic evaluations (# of actions)	---	---	---	---	---
Sales and leasing (# sales)	---	3	3	---	-3
Lease adjustments (#)	---	---	---	---	---
Lease operations (# of plans processed)	20	31	31	---	-31
Inspections and enforcement (# of inspections)	[illegible]	[illegible]	[illegible]	---	-[illegible]

Distribution of change by object class

The object class detail for the proposed $2,098,000 and 35 FTE decrease is as follows:

	FTE	Amount
Personnel compensation	35	$1,300,000
Personnel benefits		170,000
Travel and transportation of persons		40,000
Transportation of things		20,000
Rental payments to others		25,000
Communications, utilities, and miscellaneous charges		35,000
Printing and reproduction		60,000
Other services		328,000
Supplies and materials		70,000
Equipment		50,000
Total		$2,098,000

Justification of Program and Performance

Activity: Energy and Minerals Management
Subactivity: Nonenergy Minerals

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Mineral Materials	$	2,184	2,090	2,184	2,184	---
Sales	(FTE-T)	(54)		(54)	(54)	(---)
Mining Law	$	8,151	7,801	8,110	8,210	+100
Administration	(FTE-T)	(215)		(215)	(217)	(+2)
Mineral Leasing	$	4,208	4,027	4,193	3,868	-325
(Nonenergy)	(FTE-T)	(85)		(85)	(78)	(-7)
Uranium Operations	$	621	594	621	621	---
	(FTE-T)	(12)		(12)	(12)	---
Total Requirements	$	15,164	14,512	15,108	14,883	-225
	(FTE-T)	(366)		(366)	(361)	(-5)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Nonenergy Minerals	15,164	-652	14,512

The effect of this reduction will be to curtail or forego most discretionary and Bureau-option aspects of the programs and concentrate all remaining resources on meeting statutory requirements. Priority workload such as mineral patent application processing, mining claim recordation, annual filings processing, surface management and compliance will receive priority attention. Inventory workload and validity examinations other than for mineral patent will be foregone. Delays will be experienced in processing mineral materials applications which are handled on a public demand basis. Planned procurement, travel, training and equipment expenditures will be reduced to minimum levels, and hiring to fill vacant positions will be deferred.

Authorization

43 U.S.C. 1732, 1744 P.L. 94-579	Federal Land Policy and Management Act of 1976, section 302(b), authorizes the Secretary, by regulation, to prevent unnecessary or undue degradation of the public lands; and Section 314 provides for the recordation of mining claims and receipt of evidence of annual assessment work.

60 Stat. 1099	Section 402 of Reorganization Plan No. 3 of 1946 transferred mineral leasing functions from the Secretary of Agriculture to the Secretary of the Interior for certain acquired lands.
30 U.S.C. 181 *et seq.* P.L. 66-146	The Mineral Leasing Act of 1920, as amended, provides for leasing of coal, oil, oil shale, natural gas, phosphate, sodium, potassium and gilsonite on the public domain.
30 U.S.C. 601 *et seq.*	The Material Sales Act of 1947, as amended, provides for disposal of common variety materials for commercial or industrial uses and free use for governmental entities.
43 U.S.C. 31(a)	The Act of March 3, 1879, as amended, provides for the classification of the public lands and examination of the mineral resources and products of the national domain.
30 U.S.C. 351-359	The Acquired Lands Mineral Leasing Act of 1947 provides for leasing of all minerals on acquired lands.
30 U.S.C. 1701 P.L. 97-451	The Federal Oil and Gas Royalty Management Act of 1982 is a comprehensive law dealing with royalty management on OCS leases as well as onshore Federal and Indian leases. In addition to revenue accountability, it includes provisions pertaining to onshore field operations, inspections and cooperation with States and Indian tribes; duties of lessees and other lease interest owners, transporters and purchasers of oil and gas; reinstatement of onshore leases terminated by operation of law; and a requirement that the Secretary study whether royalties are adequate for coal, uranium, and nonenergy leasable minerals.
30 U.S.C. 22 *et seq.*	The Mining Law of 1872, as amended, provides for the location and patenting of mining claims where a discovery has been made for locatable minerals (e.g., gold, silver, copper, nickel, zinc, lead and the like) on public lands in specified States, mostly in the West.

MINERAL MATERIALS SALES

Objectives

The objectives of the program are to:

- Meet public demand for mineral materials found on the public lands to be used for private, State and local government needs by issuing approximately 2,700 sales contracts and free use permits;
- Recover fair market value for mineral materials sold;

- o Ensure minimum site disturbance, full environmental protection, and effective reclamation of materials sale sites; and

- o Prevent unauthorized use and take action when trespass occurs.

FY 1987 program

The 1987 Estimate for the mineral materials sales program is $2,184,000 and 54 FTE.

The public lands provide an important source of mineral materials such as building stone, sand, gravel, and common barrow which are used in construction work and for energy and other industrial development. BLM sells mineral materials both competitively and noncompetitively. The revenue from sales exceeds the funding level for the program as a whole. In addition, mineral materials are provided at no charge to qualified governmental entities for use in highway and other public projects. Community pits and common use areas are established to provide a convenient source of mineral materials to meet local needs, to minimize administrative work in processing sales, and to restrict surface disturbance and use to designated areas.

Stipulations covering minimum safety standards, environmental protection, and site reclamation are included in the disposal contracts. Bureau personnel perform site checks to ensure compliance with these stipulations, to verify collection of appropriate payments for materials used, and to prevent or take action on any unauthorized removal of mineral materials.

The disposal of mineral materials is discretionary; however, it is Bureau policy to meet the public demand for these materials. If mineral materials were not made available from the public lands, there would be a significant impact on community, industrial, and energy and mineral development in many areas of the Western States.

The planned workload accomplishments of the mineral materials sales program are as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc(+) or Dec(-)
Inventory (000's acres)	450	200	200	---
Nonexclusive use site designations (# completed)	86	77	69	-8
Materials sales/permits (# processed)	2,975	2,696	2,426	-270
Trespass (# cases completed)	56	50	45	-5

MINING LAW ADMINISTRATION

Objectives

The major objectives of the program are to:

- Administer the Mining Law of 1872 by reviewing and processing mineral patent applications;
- Implement the Surface Management Regulations for public lands (43 CFR 3802/3809) by processing plans of operation and notices of intent for development of critical and strategic minerals and other locatable minerals;
- Record unpatented mining claims and annual assessment filings as required by section 314 of FLPMA;
- Ensure compliance under 43 CFR 3802 and 3809 by monitoring operations, especially those operations using hazardous or toxic chemicals and those operations located in designated wilderness or wilderness study areas;
- Ensure consideration of critical and strategic minerals in land use planning and the resulting decisions by performing mineral resource assessments; and
- Support the National Strategic Materials and Minerals Program Advisory Committee.

Base program

The Base funding level for mining law administration is $8,110,000 and 215 FTE.

Under this program, BLM administers the provisions of the Mining Law of 1872, as amended, and the pertinent provisions of FLPMA relating to surface management and mining claim recordation. The Bureau determines the validity of unpatented mining claims; issues mineral patents; prepares mineral potential reports for withdrawals, land exchanges, sales and other land disposal actions; administers surface management regulations; and records mining claims and annual assessment filings. This program also includes geologic and mineral resource assessments for multiple use management. These program components are described in more detail below.

- Mining Claim Recordation - Under section 314 of FLPMA, the Bureau has recorded a total of 2 million mining claims and mill sites and processes about 1 million filings each year.

- Surface Management on Unpatented Mining Claims - Under sections 302(b) and 603 of FLPMA, BLM administers surface management regulations (43 CFR 3802, 3809) designed to prevent unnecessary disturbance to the public lands resulting from operations conducted under the mining laws. For all mining operations other than "casual use," regulations require that either a "plan of operation" or a "notice," depending on the size of the area of disturbance (over or under five acres) be filed with BLM. In designated sensitive areas, including wilderness study areas, a plan of operation is required for all surface-disturbing operations, regardless of size, to ensure proper site reclamation and to prevent impairment of wilderness values. BLM has 30 days to review a plan of operation and 15 days to review a notice. Notices do not require BLM's approval. Field examinations, resource assessments and environmental analyses may be required prior to the approval of plans.

- Compliance - Each plan of operation authorized under 43 CFR 3802/3809 requires periodic followup on the ground to ensure that the operation is in conformance with the reclamation plan, environmental permits (clean air, clean water, waste disposal, etc.) and other stipulations to the approved plan. Operations proceeding under a notice filed under 43 CFR 3809 require periodic followup to ensure that unnecessary or undue degradation is not occurring and that reclamation is being performed. Compliance action is required by sections 302(b) and 603(c) of FLPMA.

- Validity Determinations - When conditions warrant, the Bureau conducts a mineral examination to determine whether an unpatented mining claim meets all legal requirements for a valid discovery under the Mining Law of 1872.

- Processing Patent Applications - When a mining claimant believes he has developed a valuable mineral deposit, he may apply for patent to the claim. Processing this application involves: (1) Adjudication to ensure that the patent application is complete and legally filed, and (2) Field mineral examination by qualified personnel to ensure that on-the-ground evidence supports the application and provides information needed to either issue a patent or initiate contest proceedings to determine the mining claim's validity. In some instances, the processing of mining claim patent applications and mining claim validity determinations can become complex and costly proceedings involving both extensive legal interpretations and technical information concerning economics, mining techniques and mineral resource values. Such proceedings can take several years to complete.

The 1987 Base reflects a shift in program emphasis from workload associated with non-patent related validity determinations to work involving the recordation of mining claims, processing of annual assessments and review of plans and notices.

Increase from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	8,110	8,210	+100
(FTE-T)	(215)	(217)	(+2)

The increase of $100,000 and 2 FTE is requested to achieve an adequate level of compliance inspections of the mining operations on public lands. Compliance checks ensuring conformance with approved plans of operation and notices are being increased to approach the Bureau's goal of one compliance check per mining operation per year.

The planned workload accomplishments at the 1987 Base and Estimate funding levels are as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+)/ Dec. (-) from Base
Inventory (000's acres)	195	---	---	---	---
Mineral patent applications (# processed)	184	160	160	160	---
Validity examinations (cases completed)	170	90	50	50	---
Surface management (# plans/notices reviewed)	2,505	2,500	2,600	2,600	---
New mining claims recorded (# per year)	95,624	100,000	150,000	150,000	---
Annual filings (# processed)	798,906	900,000	1,000,000	1,150,000	+150,000
Compliance (# plans/ notices monitored)	2,407	2,400	2,400	3,100	+700

Distribution of change by object class

The object class detail for the proposed $100,000 and 2 FTE increase is as follows:

	FTE	Amount
Personnel compensation	2	$ 55,000
Personnel benefits		9,000
Travel and transportation of persons		5,000
Transportation of things		5,000
Printing and reproduction		3,000
Other services		20,000
Supplies and materials		3,000
Total		$100,000

MINERAL LEASING

Objectives

The objectives of the nonenergy mineral leasing program are to:

- o Implement the 43 CFR 3500 regulations by processing prospecting permits and lease applications including the preparation of geologic reports, mineral economic evaluations, and environmental assessments for phosphate, potassium, sodium, and other minerals in order to respond to industry's demand for these commodities;

- o Minimize environmental disturbance and protect surface resources by performing inspection/compliance checks to verify conformance with lease stipulations;

- Ensure judicious use of public resources by performing nonenergy mineral classifications, preparing classification maps, and providing mineral resource assessment data (to support land-use planning) and mineral reports for land disposal and leasing-related actions; and
- Conduct inspection and enforcement actions, including production verification checks, to ensure that the government receives proper payment for production from Federal and Indian lands.

Base program

The 1987 Base for the nonenergy mineral leasing program is $4,193,000 and 85 FTE. Under this program, minerals such as sodium, phosphate, and potassium found on public and Indian lands, and lead, zinc and other strategic minerals found on acquired and Indian lands are managed.

The Mineral Leasing Act of 1920 removed sodium, sulfur, phosphate and potassium from location under the Mining Law of 1872 and provided a leasing system for their development. The Mineral Leasing Act for Acquired Lands of 1947 authorized the leasing of these same minerals on acquired lands. The mineral leasing acts provide that (1) the Federal Government will obtain rental and royalty fees, (2) known mineral resource areas will be offered competitively, and (3) holders of prospecting permits who have explored for and made a discovery of a "valuable deposit" have a preference right to a lease. The Reorganization Plan No. 3 of 1946 authorized the leasing of hardrock minerals such as lead and zinc on certain acquired lands.

BLM is responsible for performing minerals resource assessments, classification, leasing, and post-leasing management on public lands, National Forest lands and those other Federally-acquired lands where the Federal Government owns part or all of the mineral estate and the lands are open to leasing. BLM is also responsible for supervision of minerals operations on leased Indian lands, pursuant to various Indian leasing laws.

BLM must also (1) inventory and classify land for retention of mineral rights by the government in land disposal actions; (2) provide surface management agencies with data concerning nonenergy leasable minerals for land use planning; (3) review, approve, and inspect industry operations related to exploration, development and production; and (4) conduct production checks.

Post-lease management consists of actions taken and decisions made for the regulation of exploratory and extraction operations undertaken by industry after leases or permits are issued. Regulatory functions are performed in accordance with the Department's objectives of orderly and timely development, protection of the environment, and receipt of proper royalties from minerals produced.

Public lands are an important source of several nonenergy minerals as shown in the following table:

Percent of National
Production from
Federal and Indian Lands

Mineral	(Public and Acquired)
Sodium (Soda ash)	37%
Phosphate	10%
Potassium (Potash)	84%
Lead	58%
Zinc	24%

- Sodium is used in the manufacture of glass and industrial scrubbers. Public lands are the principal source of natural soda ash.

- Phosphate is primarily used in the manufacture of fertilizers and animal feed supplements.

- Potassium (potash) is used in the production of fertilizers.

- Lead is one of the most useful industrial metals. Its major uses are in automobile batteries, building and construction materials, and small arms ammunition.

- Zinc is used in castings, as a major alloying ingredient in brass, as a protective coating for steel, and as a chemical compound in rubber and paints.

Decrease from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	4,193	3,868	-325
FTE-T	(85)	(78)	(-7)

The decrease of $325,000 and 7 FTE is possible because of reduced workload in the number of leases to be issued, lease adjustment actions, prospecting permit approvals, and a 7-million acre reduction in the number of acres inventoried. There has been a decline in industry demand for nonenergy mineral resources. This reduction in industry demand is reflected in the decreased funding level and declining units of accomplishment for the program in 1987.

The estimated workload for the nonenergy minerals program is as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-)
Inventory (000's acres)	13,402	7,209	7,209	91	-7,118
Plan amendments (# completed)	12	3	9	9	---
Environmental impact statements (# completed)	5	5	5	5	---
Pre-lease notices/ prospecting permits (# processed)	824	824	824	805	-19
Noncompetitive leasing (# processed)	104	200	200	140	-60
Classification and economic evaluation (# of actions)	254	244	200	200	---
Lease adjustments (# of adjustments)	97	84	84	69	-15
Lease operations (# plans processed)	212	212	213	213	0
Inspection and enforcement (# of inspections)	1,752	1,794	1,794	1,973	+179

Distribution of change by object class

The object class detail for the proposed $325,000 and 7 FTE decrease is as follows:

	FTE	Amount
Personnel compensation	7	$190,000
Personnel benefits		30,000
Travel and transportation of persons		25,000
Transportation of things		10,000
Printing and reproduction		5,000
Other services		40,000
Supplies and materials		20,000
Equipment		5,000
Total		$325,000

URANIUM OPERATIONS

Objectives

The major objectives of this program are to:

- Ensure compliance with NEPA and implement the 43 CFR 3500 regulations by performing management and supervisory activities for uranium lease operations on Federal acquired and Indian lands including the review of mining and exploration plans, the inspection of mining operations and the completion of environmental assessments for operations on Indian lands; and o Ensure the availability of uranium while protecting environmental values.

FY 1987 program

The 1987 Estimate for the uranium operations program is $621,000 and 12 FTE. The 1987 program will emphasize reclamation responsibilities for abandoned uranium mines on Indian lands including the Jackpile Mine in New Mexico and the Dawn and Sherwood mines in Washington. Inspection and enforcement activities will be increased to accommodate the magnitude and severity of abandoned mine sites.

Uranium is principally used in commercial applications in the generation of electric power, in the manufacturing of airplane counterweights, in uranium oxides for the chemical industry, in defense related applications, and increasingly in radioisotope applications for areas ranging from medicine to space. Public lands provide 5 percent of the Nation's production. In most cases, uranium on Federal lands is a locatable mineral subject to the Mining Law of 1872; however, uranium is leasable on Federal acquired lands and on Indian lands. BLM's program activity involves lease and permit application processing as well as supervision and inspection of leasable uranium operations and supervision of mine decommissioning and reclamation.

The development of uranium resources on Indian lands, especially in the Southwest and Northwest, has increased public and tribal awareness of (1) the effects of development on local and regional water supplies, (2) the nature of reclamation and revegetation practices, (3) spoil and mining waste management, (4) resource recovery practices, and (5) overall environmental problems. The lease supervision program addresses these concerns, evaluates their effects, and applies controls to mitigate any adverse impacts. Work efforts associated with analyses for NEPA compliance and operational inspections are expected to continue at 1986 levels. All workload measures are associated with uranium operations on Indian lands.

The estimated workload for the uranium operations program is as follows:

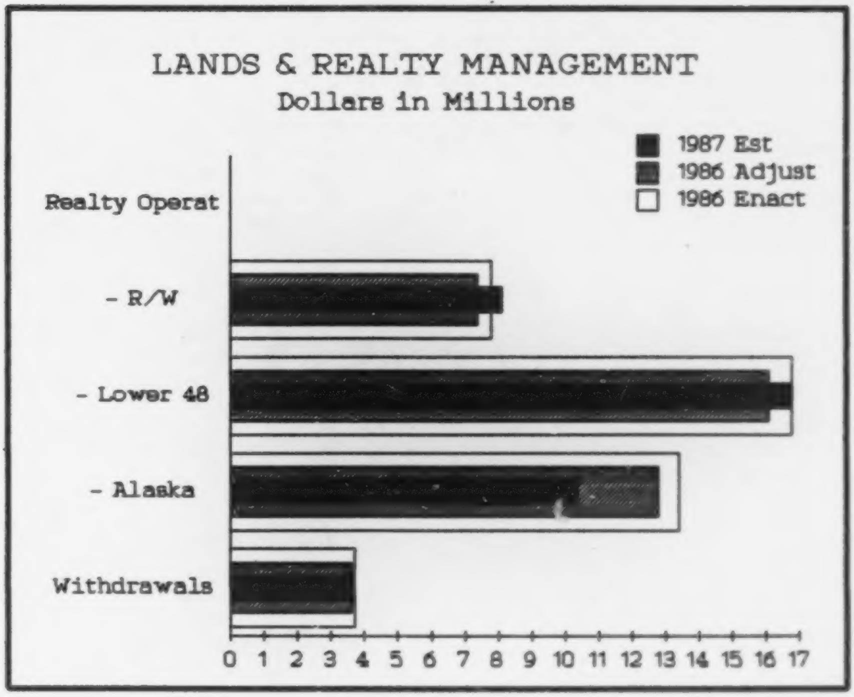
Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-)
Inventory (000's acres)	---	200	200	50	-150
Plan amendments (# completed)	35	40	40	40	---
Environmental statements (# completed)	2	2	2	2	---
Pre-lease notices/ prospecting permits (# processed)	7	8	8	8	---
Noncompetitive leasing (# processed)	9	7	7	7	---
Lease operations (# plans processed)	15	15	15	15	---
Inspection and enforcement (# inspections)	400	500	500	700	+200

Activity Summary

Activity: Lands and Realty Management

(Dollars in thousands)

Subactivity	FY 1985 Actual	1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Realty Operations	37,800	37,973	36,340	37,822	35,222	-2,600
Withdrawal Processing and Review	4,034	3,744	3,583	3,732	3,732	---
Total	41,834	41,717	39,923	41,554	38,954	-2,600



Justification of Program and Performance

Activity: Lands and Realty Management
Subactivity: Realty Operations

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Rights-of-Way	$	7,776	7,442	7,743	8,063	+320
	(FTE-T)	(215)		(215)	(220)	(+5)
Lower 48 Lands Program	$	16,799	16,076	16,725	16,725	---
	(FTE-T)	(480)		(480)	(480)	(---)
Alaska Lands Program	$	13,398	12,822	13,354	10,434	-2,920
	(FTE-T)	(310)		(310)	(285)	(-25)
Total Requirements	$	37,973	36,340	37,822	35,222	-2,600
	(FTE-T)	(1,005)		(1,005)	(985)	(-20)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A Cancellation	1986 Adjusted Approp.
Realty Operations	37,973	-1,633	36,340

As a result of the $1,633,000 P.L. 99-177 reduction, it will be necessary to fill only critical vacancies and to eliminate or defer the purchase/replacement of supplies and major equipment items. Programmatic impacts will include the following:

- Reduced monitoring of rights-of-way (R/w) grants and processing of re-billing decisions on R/w rentals;
- Deferral of action on all but the highest priority State and private exchanges;
- Limitation of land sale offerings to those mandated by statute and those meeting only the most critical disposal criteria; and
- Extension of timeframes for the conveyance of land title to the State of Alaska and Alaska Natives.

Authorization

43 U.S.C. 1701 P.L. 94-579	The Federal Land Policy and Management Act (FLPMA) of 1976 authorizes the Secretary:
43 U.S.C. 1711	- to prepare and maintain inventories of all public lands;

43 U.S.C. 1713,1719	- to sell a tract of public land if the sale of such tract meets certain disposal criteria;
43 U.S.C. 1716	- to exchange public lands if the public interest will be well-served by making that exchange;
43 U.S.C. 1721	- to convey omitted public lands to a qualified occupant if it is in the public interest to do so;
43 U.S.C. 1732	- to manage the use, occupancy, and development of the public lands through leases and permits; and
43 U.S.C. 1761-1771	- to determine suitability of public lands for rights-of-way purposes (other than those for oil and gas pipelines) and to specify the boundaries of each right-of-way.
30 U.S.C. 185 P.L. 93-153	Section 28 of the Mineral Leasing Act of 1920, as amended, authorizes the Secretary to determine suitability of public lands for oil and gas pipeline rights-of-way.
43 U.S.C. 321-323	The Desert Land Entry Act of 1877 provides for the use of irrigation to reclaim arid and semiarid public lands of the Western States through individual effort and private capital.
43 U.S.C. 315	Section 7 of the Taylor Grazing Act authorizes the Secretary to classify lands within grazing districts or withdrawn or reserved by Executive Orders 6910 and 6964 1/ and to open lands as appropriate to entry, selection, or disposal after classification. Settlement, occupancy, or occupation of such lands is not permitted before classification and opening.
43 U.S.C. 1616(d)(1)	Section 17(d) of the Alaska Native Claims Settlement Act authorizes the Secretary to withdraw, 2/ to classify or reclassify lands in Alaska, and to open such lands as appropriate after classification.

1/ Executive Order 6910 (November 26, 1934) and Executive Order 6964 (February 5, 1935) withdrew all public lands, with certain exceptions (including Alaska), from settlement, location, sale or entry under the nonmineral public land laws.

2/ Under various Public Land Orders, public lands in Alaska are subject to classification and reclassification and have been withdrawn from all forms of appropriation under the public land laws, with some exceptions, including State selections, location and entry under the mining laws, except locations for metalliferous minerals (30 U.S.C. 22), and leasing under the Mineral Leasing Act of February 25, 1920, as amended (30 U.S.C. Sections 181-287).

43 U.S.C. 869	The Recreation and Public Purposes Act of 1926, as amended, authorizes the Secretary to classify public lands for lease or sale for recreation or public purposes. Lands withdrawn for use by a Federal agency may be leased or sold with the consent of the head of that agency.
43 U.S.C. 687b	The Act of August 30, 1949, as amended, authorizes the Secretary to dispose of public lands and certain withdrawn Federal lands in Alaska that are classified as suitable for housing and industrial or commercial purposes.
16 U.S.C. 1277	Section 6(d) of the Wild and Scenic Rivers Act authorizes the Secretary to exchange or dispose of suitable Federally-owned property for non-Federal property within the authorized boundaries of any Federally-administered component of the National Wild and Scenic Rivers System.
42 U.S.C. 4321, 4331-4335, and 4341-4347 P.L. 91-190	The National Environmental Policy Act of 1969 requires the preparation of environmental impact statements for Federal projects that may have a significant effect on the environment.
16 U.S.C. 460y P.L. 91-476	The King Range Act of 1970 authorizes the acquisition and exchange of lands in the King Range National Conservation Area.
P.L. 96-586	Public Law 96-586 (Burton-Santini Act) authorizes and directs the Secretary to sell not more than 700 acres of public lands per calendar year in and around Las Vegas, Nevada, the proceeds of which are to be used to acquire environmentally-sensitive lands in the Lake Tahoe Basin of California and Nevada.
43 U.S.C. 641	Section 4 of the Carey Act of August 18, 1894 authorizes the Secretary, with the approval of the President, to patent to States, desert lands which are reclaimed, cultivated, and settled.
16 U.S.C. 3101 et. seq. P.L. 96-487	The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 provides for the designation, management, and conservation of certain public lands in the State of Alaska, including a national recreation area, a national conservation area, and wild and scenic rivers, and for other purposes.
P.L. 85-508, as amended	Alaska Statehood Act of 1958 provides for the admission of the State of Alaska into the Union and authorizes the Secretary of the Interior to transfer approximately 104.5 million acres to the State.
P.L. 98-408	Public Law 98-408 (Zuni Act) authorizes the Secretary to acquire through purchase or exchange certain private lands and to convey such lands to the Zuni Indian Tribe for religious purposes.

RIGHTS-OF-WAY

Objectives

The major objectives of the rights-of-way program are to:

- Facilitate the production and transportation of domestic energy and nonenergy resources by prompt processing of rights-of-way (R/W) applications, issuing permits, processing relinquishments, and monitoring construction of R/W's over public lands;

- Ensure that R/W uses are compatible with other existing and proposed uses of Federal lands through environmental review and assessment, establishment and use of R/W corridors, and other appropriate means; and

- Seek the highest levels of cost reimbursement and use rental attainable under existing laws and regulations.

Base program

The rights-of-way (R/W) program is funded through a combination of this apppropriation program element and the R/W cost recovery funds received in the indefinite "Service Charges, Deposits and Forfeitures" appropriation. The 1987 Base funding level of the R/W program from the MLR appropriation is $7,743,000 and 215 FTE. The Base funding level from the indefinite appropriation portion is $1,690,000 and 39 FTE; yielding an estimated total Base of $9,433,000 and 254 FTE for the R/W program.

The primary focus of the R/W program is the processing of public demand applications from individuals, corporations, utility companies, associations, and State and local governments. Such applications are for a wide range of uses, such as the construction and operation of oil and gas pipelines, power transmission lines, energy development and distribution facilities, access roads, communication sites, ditches, and water pipelines. In some cases, the requests are made to authorize an existing but unauthorized use.

The activity of the R/W program can be classified as either casework or non-casework. Non-casework includes such functions as pre-application review, corridor planning, research, managerial direction, training, workshops and other aspects of program management not directly associated with a case. All of this work is funded from the MLR appropriation.

Casework includes preliminary investigations analyzing alternative location possibilities, preparation of environmental assessments, appraisals, development of special permit stipulations, issuance of R/W grants and monitoring of construction and reclamation to ensure compliance with permit stipulations. The funding source for casework is a function of the law under which application is made and the status of the applicant. When the applicant is a State government, local government or agency who will use the right for governmental purposes, the case is considered non-reimbursable, regardless of the law under which the application is made, and is funded from the MLR appropriation.

For applications processed under the Mineral Leasing Act (MLA) of 1920, full cost recovery is allowed; and, with the exception of the situation described below, all funding comes from the Service Charges, Deposits and Forfeitures appropriation. For applications processed under the Federal Land Policy and Management Act (FLPMA) of 1976, charges are adjusted for the "reasonableness" criteria contained in Section 304 of the Act. These adjustments are for actions which are not for the exclusive benefit of the applicant, including appraisals, inventories, and environmental studies which must be completed to process the application but may also have public value for management decisions. The costs of such adjustments are considered non-reimbursable and are funded from the MLR appropriation. All other costs are funded from "Service Charges, Deposits and Forfeitures."

The charges for both MLA and FLPMA cases under $5,000 are established by separate fee schedules. These schedules are periodically updated with field studies of actual costs by case size. Since there is a time lag between the studies and implementation, fee schedule charges may not cover the Bureau's actual cost of processing a R/W. When this occurs, costs exceeding the amount received through the fee schedule must be funded from the MLR appropriation.

The following table illustrates the funding source for various R/W workloads:

	Funding Appropriation	
Type of R/W Workload	Management of Lands and Resources	Service Charges, Deposits and Forfeitures
Non-casework	x	
Non-reimbursable cases	x	
FLPMA cases over $5,000	x	x
FLPMA cases, fee schedule	(x)	x
MLA cases over $5,000		x
MLA cases, fee schedule	(x)	x

( ) Funds the additional cost of work required when fee schedule charges are inadequate to cover total Bureau costs.

Increase from 1987 Base

(dollars in thousands)

	1987 Base	1987 Estimate	Difference
$	7,743	8,063	+320
(FTE)	(215)	(220)	(+5)

The increase is required to pay for the government's "reasonable" share of major R/W grant administration where significant public benefit or service is provided, and to support an anticipated increased workload in 1987 caused by the development of new fair market rental procedures. During the development of these procedures, a hold has been placed on completing new appraisals pending the completion of rulemaking. This, in turn, will necessitate the recalculation and re-billing of rentals for all previously issued R/W's for which rent is being collected. Of the approximately 26,000 R/W's currently issued, 20 percent (5,700) are due for reappraisal in 1987 and will be re-billed then. Of these, approximately 3,000 are currently in appeal status and no rental is being collected. The expected re-billing would result in receipts almost double the amount currently being collected.

The number of actions which will be processed in the R/W program at the estimated total 1987 funding level of $10,758,000 and 259 FTE (includes funding received from cost recovery reimbursement) is as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Mineral Leasing Act:					
Number of cases processed					
- under $5,000 cost	1,171	1,100	1,100	1,100	---
- over $5,000 cost	18	25	25	25	---
FLPMA applications:					
Number of cases processed					
- under $5,000 cost	1,836	1,900	1,900	1,900	---
- over $5,000 cost	51	50	50	50	---
Non-reimbursable cases processed (number)	867	600	600	600	---
Pre-application work (number of cases)	3,874	3,675	3,675	3,675	---
Re-appraisal cases (number)	---	2,000	2,000	5,700	+3,700

Distribution of change by object class

The object class detail for the proposed increase of $320,000 and 5 FTE is as follows:

	FTE	Amount
Personnel compensation	5	$136,000
Personnel benefits		22,000
Travel and transportation of persons		25,000
Transportation of things		15,000
Communications, utilities, and miscellaneous charges		20,000
Printing and reproduction		5,000
Other services		72,000
Supplies and materials		20,000
Equipment		5,000
Total		$320,000

LOWER 48 LANDS PROGRAM

Objectives

The major objectives of the lower 48 lands program are to:

- Process public requests for land use authorizations on a current basis;
- Respond to the requirements of specific legislation affecting land disposal such as the Desert Land Entry Act, the Burton-Santini Act and the Zuni Act;
- Complete, by exchange, land adjustments that are needed to improve the manageability of public land resource values;
- Maintain and improve the land records system, including the implementation of the Automated Land and Mineral Record System (ALMRS);
- Respond promptly to public inquiries for land status and land title documents;
- Process cases and complete actions allowed by law on applications to resolve issues of clear title for land previously transferred from Federal ownership;
- Resolve cases of unauthorized use; and,
- Sell at fair market value, public lands that meet disposal criteria in order to improve land ownership patterns, improve cost effectiveness of managing Federal lands, and meet community or regional growth needs thereby making public lands available to non-Federal agencies or the private sector where consistent with land use plans or specific legislation.

FY 1987 program

The 1987 Estimate for the Lower 48 Lands program is $16,725,000 and 480 FTE.

This program provides service to the public, State, local and other Federal agencies by issuing land use authorizations and effecting land tenure adjustments and land disposal actions [1], exclusive of Alaska, as authorized by existing laws. Also included in this program is the operation and improvement of systems for maintaining the official public land records and the task of responding to public inquiries about public land status, use, and acquisition.

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[1] The category of Land use authorization includes the issuance of grants, easements, leases, and permits for use of public land for recreation and public purposes, and other non-mineral uses while ownership of the land remains with the Federal Government. Land tenure adjustment is the exchange of parcels of land with private owners or with States, and the adjustment of boundaries with other Federal agencies. Land disposal is the patenting (transfer of ownership) through sale under Section 203 of the Federal Land Policy and Management Act or other conveyance authorities such as the Desert Land Entry Act, Airport and Airways Act, etc.

Land Use Authorizations

Recreation and Public Purposes (R&PP) Act leases generally fall under the "Good Neighbor" concept which embodies the principles of public service and responsiveness to which the Secretary and the Administration are committed. Many communities of the West are surrounded by public lands and are directly or indirectly dependent upon multiple use of those lands for recreational use and other public purposes. Land use authorizations processed by BLM assist local governments in meeting basic community service needs. Examples include authorizations for county/State parks and school sites.

Other land use authorizations under FLPMA, Section 302(b), provide public land through lease, permit or easement for use, occupancy and development of agricultural, residential and small trade and manufacturing businesses. As of September 1985, 739 authorizations were in effect with revenues exceeding $239,000.

Desert Land Entry Cases

Some 1,630 applications for desert land entries (DLE's) were on file with the BLM as of October 1, 1984. BLM processed 447 applications in 1985 and plans to process 450 in 1986 and 1987. There are, however, circumstances involving the lack of water and/or ongoing litigation over water rights in the States of Nevada and Idaho which may severely limit BLM's ability to control the rate at which DLE applications are processed.

Land Tenure Adjustments

As outstanding entitlements under the State Indemnity Selection program are being satisfied, the States are turning increasingly to land exchanges to meet use demands and consolidate holdings. Private exchange opportunities are also being identified in completed land use plans and by other Federal agencies as a means of consolidating ownership, eliminating "inholdings," and enhancing the management of both Federal and non-Federal properties. An estimated 255,000 acres will be exchanged in 1987. Action will also be initiated on exchange proposals which will be consummated in 1988 and 1989.

"Project Bold," a complex land exchange proposal involving the State of Utah and BLM, is not included in the program acreage estimate. The project, designed to allow statewide exchange of lands of roughly equivalent value to create manageable units, would also remove intermingled State lands from areas administered by the BLM, National Park Service, the military and Indian reservations. If authorizing legislation should be enacted, BLM would incur significant additional processing costs. Additional funding for this work would then have to be sought through the budgetary process.

Approximately 250,000 acres of public lands are involved in the Navajo-Hopi land resettlement program in New Mexico and Arizona. On July 1, 1983, the Navajo Tribal Council presented BLM with an application requesting the acquisition of six privately-owned ranches in Apache County, Arizona. BLM successfully negotiated with the Arizona landowners to acquire their holdings through land exchange. The last of the Arizona properties was acquired in December of 1985, and 215,006 acres have been placed in trust for the Navajo tribe.

In addition to the actions in Arizona, transfer of 35,000 acres of the BLM-administered Paragon Ranch area of New Mexico is awaiting receipt of an amended application from the Navajo Tribe. Notwithstanding any unforeseen complications, BLM expects to complete the program and close out the project office and staff by the end of 1986.

Land Disposals

The Bureau conveyed 5,000 acres of public land to Western States under the State Indemnity Program in 1985. The Secretary of the Interior has assured the States that indemnity (in-lieu) land selections will be processed promptly in close cooperation with State governments. In a memorandum of understanding with the Western States Land Commissioners Association, dated January 1, 1981, BLM agreed that more than one-half million acres should be transferred to the States in fulfillment of the States' outstanding indemnity rights. Approximately 165,000 acres of entitlement still remained at the end of 1985. We anticipate that the States will apply for their remaining entitlements at a much slower rate than in previous years as full satisfaction nears. BLM expects to process approximately 10,000 acres in 1986 and 1987.

Land sale offerings under the authority of Section 203 of FLPMA will amount to about 40,000 acres each in 1985 and 1986 and will decrease to 10,000 acres in 1987. The objectives of the FLPMA land sale program are to dispose of public lands that would serve higher and better uses in private ownership as identified through a land use planning process, to improve management of Federal lands through the sale of tracts that are isolated or otherwise difficult to manage, and to dispose of lands acquired for a specific purpose that are no longer needed for that purpose or any other Federal purpose.

Work will also continue on sales in Nevada under the Burton-Santini Act, which provides for the offering of up to 700 acres annually in Clark County, Nevada.

Unauthorized Use Abatement

Work on resolution of the long-standing dispute over title and unauthorized use in the "New Mexico Rio Grande Occupancy Resolution Area" will continue in 1987 at the 1986 level. BLM anticipates substantial completion of this program by 1990.

Resolution of instances involving unauthorized use of public lands continues to be a challenge to the Bureau. Case processing has been streamlined, and unauthorized use fees have been increased to discourage unauthorized agricultural use. An inventory of unauthorized agricultural use was initiated in 1985 in Idaho and will continue into 1987. In 1987, the Bureau plans to complete action on 500 cases of unauthorized use, an increase of 50 cases over the 1986 Estimate.

Diminishing public demand for R&PP authorizations as well as the reduced level planned for public land sale provided BLM the opportunity to adjust the level of effort among the various program workloads from the 1986 level. Consequently, the Bureau can increase the level of effort on unauthorized use abatement and respond more promptly to public demand land exchanges proposed in 1987.

Maintaining the Official Land Records

The remaining responsibilities of the Lower 48 lands program include the operation, maintenance, and updating of the complex series of public land records which make up the official, original public land records of the United States; responding to public inquiries regarding land status, availability and application procedures; and the preparation of activity plans and amendments to land use plans.

Automated Land and Mineral Record System (ALMRS)

The ALMRS effort was initiated in 1983 to develop and implement automated procedures for realty and minerals case management, land descriptions, land and minerals ownership/use authorization status, and geographic coordinate data covering all land and minerals ownerships where BLM has a surface and/or subsurface management interest. The system will allow for logical progression from the existing manual records system to a fully automated system. This will eventually enable BLM to retire its existing hard-copy records which consist of the historical index, master title plat (MTP) and land use plat which are currently the foundation of the Bureau's lands, minerals, and renewable resources program activities. When fully implemented, ALMRS will contain data for approximately 46,000 townships.

Initial efforts in the ALMRS program have been devoted to automating lands and minerals casework and designing an automated system that will integrate data bases for legal land description and status, including mining claims. By June 1, 1985, approximately 270,000 cases had been entered into a case recordation data base that is capable of providing automated serial register pages, limited statistical reports, case counts, individual case tracking, and case abstracts. By focusing on the case recordation data base, we have been able to eliminate backlogs in land and mineral case work.

During 1985, BLM contracted with the Federal Computer Performance Evaluation and Simulation Center (FEDSIM) to assess alternative system architectures (hardware, software, telecommunications, data base locations, etc.). The feasibility study was completed in December 1985, and a preliminary report is presently being reviewed by agencies potentially affected by ALMRS. A copy of the final feasibility study document will be sent to Congress after it is completed. The study, in conjunction with prototype system testing, will enable the Bureau to develop an accurate estimate of the long-term project schedule and system costs. After the systems requirements are fully defined, systems design work will proceed. The systems design stage will define how data bases for legal land description, current status, and geographic reference will be linked with the existing case data and mining claim data bases.

A prototype system will be tested in the two BLM pilot State offices of Arizona and New Mexico during 1987. In 1988 or early 1989, actual implementation of a fully operational ALMRS will occur in Arizona and New Mexico, including automated case tracking, report generation (statistical and title reports among others), and some automated graphic display capability to replace the present hard-copy plats for providing land status. We anticipate that implementation and operation of ALMRS in the remaining State offices will begin in 1989. System implementation will proceed as each State completes data collection and entry and as ADP equipment is purchased for use with the system.

Legal land description data are now being collected in all States with completion scheduled by the end of 1987. Status data collection in the pilot States will be completed by the end of 1986 and in the other States between 1987-1992.

The 1987 Estimate includes $3,006,000 for ALMRS data collection and system development. Additional funding, primarily for equipment acquisition and ADP system development, is identified in the data management subactivity.

Planned workload accomplishments in the Lower 48 lands program are as follows:

Workload Measure (# = cases)	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Recreation and Public Purposes (R&PP) leases and patent applications (#)	270	310	250	-60
State indemnity selections (000 acres)	5	10	10	---
Exchanges (000 acres):				
State	176	60	70	+10
Private	165	155	185	+30
Desert land entries (#)	447	450	450	---
Public land offered for sale (000 acres)	29	40	10	-30
Burton-Santini Act offers (acres)	700	700	700	---
NM Rio Grande occupancy resolution (#)	120	90	90	---
Unauthorized use (#)	997	450	500	+50

ALASKA LANDS PROGRAM

Objectives

The objectives of the Alaska Lands Program are to:

- Issue interim conveyances or patents to Native corporations under the Alaska Native Claims Settlement Act (ANCSA),
- Issue tentative approval of conveyances or patents to the State of Alaska,
- Process Native allotment parcels in Alaska to the point of approval for survey, and
- Process other lands cases in order to expedite the conveyance of lands to the State of Alaska and Native corporations.

Base program

Base funding for the Alaska lands program is $13,354,000 and 310 FTE.

The Base program in Alaska encompasses a number of different realty actions, but the primary focus is on State and Native conveyances. Land conveyance in Alaska is a two-step process requiring both title transfer and title confirmation (by patent) following survey. Most Federal land in Alaska is unsurveyed. Because of this, Congress authorized title transfer documents to the Native corporations (interim conveyance) and to the State of Alaska (tentative approval) which can be granted before survey. Final entitlement calculation and specific exclusion of inholdings takes place after survey when title confirmation in the form of a patent is issued.

In 1986, the rate of transfer for lands began to slow while the completion of survey and issuance of patents increased. Cumulative title transfers to the State and Native corporations will be 81 percent completed by the end of 1986.

These transfers consist largely of tentative approvals and interim conveyances. Approximately 21 percent of the lands transferred will have had a completed survey and patent issued.

The slowing of the title transfer process reflects both a shift of initiative for the remaining land transfers and a secondary workload of land entitlement awaiting survey. The State of Alaska continues to emphasize the identification of smaller but "higher quality" areas for its conveyances. These smaller land areas often are more difficult and complex to adjudicate than the largely unpopulated "block lands" transferred previously. Under the terms of a court settlement, the State now identifies in an annual request the lands it wants transferred. The State has asked for increased patent issuance on these priority lands rather than for large title transfer acreages. Native corporations have received title to most of the lands they selected around villages. The village corporations must now identify and place a priority on lands being allocated by regional corporations. Regional corporations must identify in priority order their remaining entitlements. Once BLM has received these priorities, it can transfer additional land to the Native, regional, and village corporations. Finally, until survey, a small percentage of land is "held back" to avoid an over-conveyance of land.

To ensure an increase in acreage transferred through patents issued, BLM has adopted a patent plan process. This is a coordinated effort between BLM realty and survey staffs in Alaska. The plan calls for the identification of a geographic area, or "window," and a concentrated effort to complete all needed adjudication of inholdings in the area to ensure efficient survey and patent of all adjudicated parcels.

Native allotments are one of the most numerous types of claims which must be adjudicated and surveyed out from larger blocks of land selected by the Native corporations and the State before final patent can be issued to the corporation or State. Therefore, to make the patent plan process work most efficiently, a major priority is being placed on adjudication of Native allotments in the geographic "windows."

Section 17(b) of the Alaska Native Claims Settlement Act of 1971 authorizes the Secretary to reserve certain public easements across Native lands in Alaska. Easements are reserved at the time of conveyance and contained in the conveyance document. The location, width, and authorized uses for the easements are specifically identified. The Native corporations want the Federal Government to specify the management principles to be applied to these easements and the responsibilities of each party in monitoring and regulating use. A coordinated effort by NPS, FWS, and BLM is underway to inventory the easements. Easement management (location and marking) will follow with emphasis first on high-use areas.

Decrease from the 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	13,354	10,434	-2,920
(FTE-T)	(310)	(285)	(-25)

The 1987 Estimate level of $10,434,000 and 285 FTE will continue funding to accomplish the critical land transfer programs but at a rate of 1.3 million acres less than the Base level. Other lands activities will also continue to be accomplished but at a reduced level as shown in the following workload comparison table:

Workload Measures	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-)
Native conveyances (million acres)	1.0	2.0	2.5	2.0	-.5
State conveyances (million acres)	4.2	3.4	3.6	2.8	-.8
Native allotments (parcels)	1,470	1,350	1,150	800	-350
Land use authorizations (cases)	116	208	210	100	-110
Land tenure adjustments (cases)	1	1	1	---	-1
Unauthorized use (cases)	19	12	18	9	-9

Even at the reduced levels, the program will achieve a substantial level of land transfers and continue making considerable progress in reaching the program goals.

The Alaska conveyance schedules are:

(acres in millions)

NATIVE CORPORATIONS	Thru FY 1984	FY 1985	FY 1986	FY 1987	Future
Interim Conveyances					
Annually	xxx	1.0	1.0	.5	8.3
Cumulative Total	33.2	34.2	35.2	35.7	44.0
Patent *					
Annually	xxx	xxx	1.0	1.5	37.1
Cumulative Total	3.4	3.4	4.4	5.9	43.0
STATE					
Tentative Approval					
Annually	xxx	2.0	1.4	.8	19.3
Cumulative Total	81.0	83.0	84.4	85.2	104.5
Patent *					
Annually	xxx	2.2	2.0	2.0	75.3
Cumulative Total	23.0	25.2	27.2	29.2	104.5

* Patent acreage is directly dependent on acreage surveyed.

Distribution of change by object class

The object class detail for the proposed decrease of $2,920,000 and 25 FTE is as follows:

	FTE	Amount
Personnel compensation	25	$ 682,000
Personnel benefits		109,000
Travel and transportation of persons		85,000
Communications, utilities and miscellaneous charges		100,000
Other services		1,884,000
Supplies and materials		60,000
		$2,920,000

Justification of Program and Performance

Activity: Lands and Realty Management
Subactivity: Withdrawal Processing and Review

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
$	3,744	3,583	3,732	3,732	---
(FTE-T)	(82)		(83)	(83)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Withdrawal Processing and Review	3,744	-161	3,583

The reduction of $161,000 will reduce the Bureau's capability to handle the increased withdrawal review workload anticipated from other holding agencies on a current basis resulting in a deferral of about 30 cases to 1987.

Authorization

43 U.S.C. 1711, 1714 P.L. 94-579	The Federal Land Policy and Management Act (FLPMA) of 1976, Sections 202(d), 204(a) and 204(l) has the following major provisions:

202(d) provides that land classifications are subject to review in the land use planning process. Also affirmed is the Secretary's discretion to modify or terminate any such classification when the action taken is consistent with the Bureau's land use plans. These actions are commonly referred to as terminations or modifications of classifications.

204(a) confers separate discretionary authority on the Secretary to make, modify, extend or revoke withdrawals in the normal course of business. These revocation actions do not require Presidential or congressional review and include withdrawals sought to be revoked prior to the passage of FLPMA 204(l) or to permit a subsequent action taken in the ordinary course of business. These actions are commonly referred to as revocations of withdrawals.

204(l) requires the Secretary to review certain withdrawals in the 11 Western States by October 1991 to determine whether and for how long existing withdrawals should be continued. Under this authority, a Secretary may terminate withdrawals only upon recommendation of the President and following review by Congress. These actions are commonly referred to as withdrawal reviews.

43 U.S.C. 869	The Recreation and Public Purposes Act of 1926, as amended, authorizes the Secretary to classify public lands for lease or sale for recreation or public purposes. Lands withdrawn for use by a Federal agency may be leased or sold with the consent of the head of that agency.
43 U.S.C. [illegible]	The Act of [illegible], as amended, authorizes the Secretary to dispose of public lands and certain withdrawn Federal lands in Alaska that are classified as suitable for housing and industrial or commercial purposes.
43 U.S.C. 315f P.L. 73-482	Section 7 of the Taylor Grazing Act authorizes the Secretary to classify lands within grazing districts or withdrawn or reserved by Executive Orders 6910 and 6964 1/ and to open lands, as appropriate, to entry, selection, or disposal after classification. However, settlement, or occupation of such lands is not permitted before classification and opening.
43 U.S.C. [illegible], [illegible] P.L. 92-203	The Alaska Native Claims Settlement Act (ANCSA), section [illegible], provides that the lands in Alaska withdrawn for the administration of the Federal Government will be the smallest practicable tract as determined by the Secretary of the Interior, and section [illegible] provides for [illegible] and withdrawal review pursuant to the [illegible]
16 U.S.C. [illegible], 43 U.S.C. [illegible] note P.L. 96-487	Section [illegible] of the Alaska National Interest Lands Conservation Act [illegible]
43 U.S.C. 31(a)	The Act of March 3, 1879, authorized classification of public lands.
16 U.S.C. 818	Section 24 of the Federal Power Act as amended, allows other uses of Federal waterpower withdrawals with Federal Energy Regulatory Commission approval.

Objectives

The major objectives of the withdrawal processing and review program are to:

- Process new withdrawal applications on a current basis.
- Continue withdrawal revocation processing on a current basis.
- Continue review of other agencies' withdrawals based on specific approved schedules.

1/ Executive Order 6910 (November 26, 1934) and Executive Order 6964 (February 5, 1935) withdrew all public lands, with certain exceptions (including Alaska), from settlement, location, sale or entry [illegible] land laws.

- Complete review of all BLM classification orders by 1987; and

- Continue review of waterpower and water storage withdrawals to be completed in 1991.

FY 1987 program

The 1987 Estimate for the withdrawal processing and review program is $3,732,000 and 93 FTE.

The Federal Land Policy and Management Act (FLPMA), Section 204(l) requires a comprehensive 15-year review of certain withdrawals of Federal lands in the 11 Western States, exclusive of Alaska. There are extensive withdrawals in Alaska, which are being reviewed under the provisions of the Alaska Native Claims Settlement Act when possible conveyance to Alaska Natives is involved, and under the provisions of the Alaska National Interest Lands Conservation Act and other authorities for possible opening of public lands to mining, mineral leasing, settlement, and other disposals.

FLPMA also requires that all applications for withdrawals pending at the time of passage be processed by 1991. All withdrawal applications filed after passage must be processed within two years to limit the segregative effect of such applications.

To "withdraw" public lands means to withhold them from settlement, sale, location, or entry, under one or more of the general land and mineral laws. The purpose of a withdrawal is to limit activities under those laws and to maintain other public values in the withdrawn area or reserve the area for a particular public purpose or program. Because of the vast acreage of land withdrawals and classification in the absence of land use planning, FLPMA mandated their review, termination, modification, or continuation by 1991.

An updated inventory (mid-1981) under provisions of Section 204(l) of FLPMA identified 5,863 withdrawals covering 76 million acres. Classification orders segregated another 169 million acres partially or wholly from entry under the public land laws, including in some cases mining and mineral leasing. Withdrawal and classification reviews are being conducted systematically and expeditiously to ensure that there are no unnecessary closures. Any decreases in the number of withdrawal reviews will not affect concentration on priority areas with mineral potential.

Since 1984, BLM and other holding agencies have been working with mutually-approved schedules designed to complete review of other agency withdrawals by 1991. The withdrawal review workload for 1987 will consist, to a great extent, of review of other agency withdrawals. Successful completion of this schedule depends on the ability of other agencies to make timely submissions of their withdrawal rejustifications to the appropriate BLM State offices. BLM is making every effort to encourage the other agencies to be responsive and is providing guidance on which withdrawals they should review first.

Withdrawal processing and review in Alaska includes the review of Federal holdings pursuant to Section 3(e) of ANCSA, an integral part of the entire State and Native conveyance program. Alaska's withdrawal review also includes revocations/restorations and transfer of jurisdiction work for other Federal agencies in Alaska.

The waterpower program encompasses the identification, evaluation, and classification of Federal lands with significant water and power potential under the provisions of the Federal Power Act of 1926, as amended. Classifications are also made to protect potential water and power resources from encumbrances and uses which would destroy site values for waterpower, and to provide land management agencies with information to ensure that potential water and power sites are included in land use plans developed by such agencies.

In 1987, the waterpower program will continue the 7-year effort scheduled for completion in 1991 to review approximately 950 existing withdrawals for waterpower and water storage. Though the actual withdrawals can only be revoked with the consent of the Federal Energy Regulatory Commission (FERC), BLM will conduct these reviews to determine on a case-by-case basis if the water resource still exists and requires protection. Findings will be forwarded to the Secretary with recommendations for continuation, termination, or revocation of the withdrawals.

On July 15, 1985, the National Wildlife Federation (NWF) filed suit in the U.S. District Court for the District of Columbia alleging that BLM's conduct of withdrawal review activities was not in concert with the intent of Congress. On December 4, 1985, the NWF's motion for preliminary injunction was granted. In response, the government filed a motion to "amend, consider and clarify" the Court Order of December 4 and a motion for a stay of the court's order. A stay of the preliminary injunction pending reconsideration and clarification was subsequently granted. On January 13, 1986, each party filed its order with the Court; and a ruling is expected on one of the orders or from the Court.

The outcome of this lawsuit is uncertain at this time; however, the impact could be significant depending on the final resolution of the case.

Actual workload accomplishments for 1985 and planned accomplishments for 1986 and 1987 are as follows:

Workload Measure	FY 1985 Actual	FY 1986 1/ Estimate	FY 1987 1/ Estimate	Inc. (+) or Dec. (-)
Withdrawal processing (# cases)	211	400	100	-300
Withdrawal review (# cases)	456	525	500	-25
Classification review (# cases)	51	200	50	-150
Waterpower cases (#)	485	400	400	---

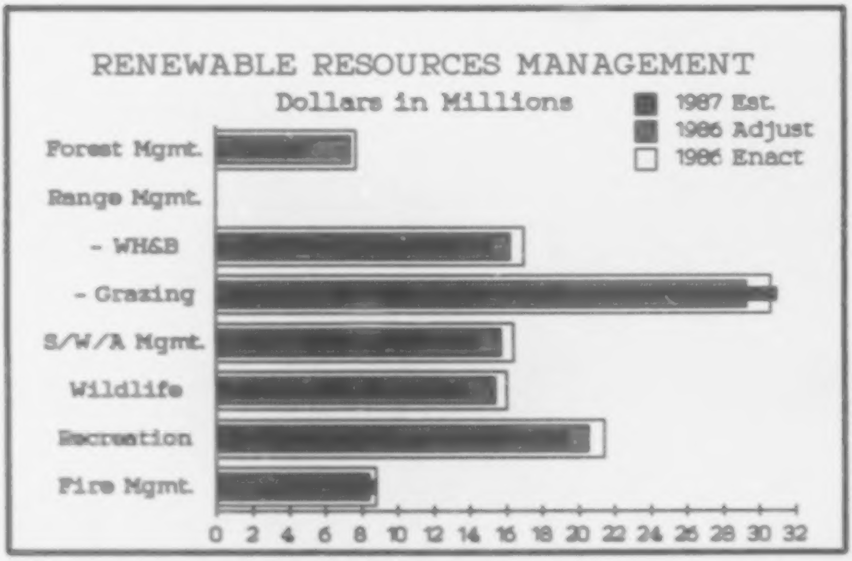
1/ The projected workloads for 1986 and 1987 could be altered significantly depending upon the nature of a pending Court order to be issued in the National Wildlife Federation v. Burford lawsuit.

Activity Summary

Activity: Renewable Resources Management

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Forest Management	7,755	7,728	7,396	7,710	5,106	-2,604
Range Management	48,008	47,600	45,553	47,465	46,060	-1,405
Soil, Water and Air Management	16,459	16,391	15,686	16,299	14,469	-1,830
Wildlife Habitat Management	15,833	16,054	15,364	15,961	13,801	-2,160
Recreation Management	18,448	21,397	20,477	21,314	19,530	-1,784
Fire Management	7,390	8,824	8,444	8,248	8,847	+599
Total	113,893	117,994	112,920	116,997	107,813	-9,184



Justification of Program and Performance

Activity: Renewable Resources Management
Subactivity: Forest Management

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Public Domain	$	6,814	6,521	6,796	5,106	-1,690
	(FTE-T)	(150)		(150)	(127)	(-23)
Western Oregon P.D.	$	914	875	914	0	-914
	(FTE-T)	(—)		(—)	(—)	(—)
Total Requirements	$	7,728	7,396	7,710	5,106	-2,604
	(FTE-T)	(150)		(150)	(127)	(—)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Forest Management	7,728	-332	7,396

The impact of the P.L. 99-177 cancellation of $332,000 will be the deferral of contracts for 550 acres of pre-commercial thinning and a reduction of effort on timber sale planning. This reduced effort will not impact the 1986 timber sale volume because most of this planning was completed in prior years. However, it will reduce the offering in 1987 and 1988 by 4 MMBF and 8 MMBF respectively. The planning effort reduction will be accomplished by not hiring temporary employees who normally assist in this work. The amount of support provided to the western Oregon forestry program is reduced by $39,000 which will reduce studies in support of intensified forestry research in Oregon.

Authorization

43 U.S.C. 1711, 1732 P.L. 94-579	The Federal Land Policy and Management Act of 1976 provides for management, protection, and marketing of resources on a sustained yield basis and for the preparation and maintenance, on a continuing basis, of an inventory of public land resources and other values.
16 U.S.C. 594 P.L. 67-315	The Timber Protection Act of 1922 provides for the protection of timber from fire, disease, and insects.

PUBLIC DOMAIN

Objectives

The objectives of the Public Domain (P.D.) forestry program for public land forest resources outside of western Oregon are to:

- Maintain forest productivity to help meet current and future domestic needs for timber and other wood products,
- Offer for sale 60 million board feet of commercial sawtimber from those commercial forest lands which produce significant, positive economic return,
- Ensure timber sale contract compliance,
- Issue 54,000 fuelwood and other forest permits annually,
- Reforest harvested areas promptly,
- Achieve or maintain optimum conditions for tree and stand growth (thinnings/release), and
- Reduce the reforestation backlog acreage.

Base program

The 1987 Base program is $6,796,000 and 150 FTE. This program provides for the management and development of 2.1 million acres of commercial forest lands and 18 million acres of woodlands not capable of producing commercial timber but which are a source of fuelwood, posts/poles, Christmas trees, and pine nuts.

All BLM public domain forest lands are managed under the Federal Land Policy and Management Act (FLPMA) of 1976. BLM's Forest Land Policy, which is based on this Act, requires management of these lands under multiple-use principles for timber production as well as other uses and values in order to achieve the widest range of benefits on a sustained basis to meet national needs. This policy highlights the importance of timber production on these lands and states that no single use may preclude other uses unless it is congressionally specified or justified in a formal finding and is in the national interest. Within this broad policy directive, BLM manages the public domain forest lands to contribute to meeting the Nation's demand for wood products and to obtain fair market value for timber and forest product use.

Commercial Forest Land Management

Commercial forest land management focuses on 1.2 million acres of commercial timber lands within the allowable cut base which annually produce 92 million board feet of timber valued at $7 million. Each timber sale is screened to insure that the return to the Government in receipts will justify the costs of holding the sale. Some sales are held on areas where the timber has been infected by insects. In such cases, less than a full return on costs may be accepted in order to prevent the spread of infestation to more valuable timber.

The major elements of the commercial forest management component are timber sale planning, sale preparation and sale administration. Planning identifies the need for physical and legal access, cadastral survey requirements, and road design. Preparation includes sale layout, access acquisition, environmental analysis, timber cruising and appraisal, contract preparation and sale advertising. Sale administration involves conducting the sales and awarding the contracts for 100 sales planned in the six States (California, Colorado, Idaho, Montana, Oregon, and Wyoming) with public domain sawtimber programs.

An appropriate level of technical support and management expertise is also needed to conduct the forest management program. This includes multiple-use planning, inventory, and trespass abatement.

Inventory and management planning is the gathering of data necessary for preparation and maintenance of land use and timber management plans and the computation of the allowable harvest levels on a 10-year cycle.

Woodland Management

Historically, woodlands have received little intensive management, and wood products have been removed from these lands predominantly by free use. Management consisted of identifying those areas of dead wood or overgrowth where free use permits would aid in removing these products. However, in recent years, the public demand for these wood products has increased dramatically.

BLM managers are now emphasizing product sales and discourage free use. Some inventory of these lands is being accomplished, and the variety of woodland products being sold is increasing. Activities carried out for other resource programs, such as removal of scrub stands by mechanical chaining to improve range conditions, have been redirected to yield forest product sales as well.

BLM has undertaken a long-term effort to inventory all of the estimated 18 million woodland acres and to identify priorities for sales and other management activities. In 1987 an increase in inventory of 4.3 million acres will be accomplished within base level funding.

Planned sales at the Base level are 130,000 cords of fuelwood, 60,000 Christmas trees, and other woodland products such as posts/poles, pine nuts, jojoba beans, cactus, boughs, and wildings with an estimated value of $750,000.

Forest Development

Forest development provides for reforestation and other practices which increase the productivity of the commercial timber lands. Reforestation is frequently necessary to ensure both regeneration of trees and that the new forest will contain the most desirable timber species. Prescribed burn and site preparation are often required prior to the actual reforestation. Land treatments are sometimes necessary so that planted seedlings can achieve full development without undue competition from other plant species which tend to proliferate in newly cut areas. Later, precommercial thinning may be necessary to remove excess trees, to concentrate light, moisture, and nutrients on fewer trees of better quality. These and other practices result in a greater quantity and quality of merchantable timber in a given stand. Precommercial thinning is an especially important practice in the public lands areas since there are many overstocked timber stands which have become stagnant in growth and are now particularly subject to insect infestation.

An analysis of forest development needs indicated that backlogs of reforestation and timber stand improvement have developed through the years. This backlog was caused by several factors. Fire and insect infestation have destroyed many stands which have not been rehabilitated. Reforestation techniques employed before the 1970's suffered a high failure rate. Little was known about proper initial stocking levels (e.g., trees planted per acre on a given site) on these forests. This led to many reforestation failures or to instances of timber stands which now require thinning. Improved reforestation techniques and improved knowledge about proper stocking levels have greatly reduced reforestation failures. Additional funding in 1985 and 1986 targeted for backlog reduction have allowed the BLM to better identify the situation and begin a gradual reduction in reforestation backlog acreage.

Decrease from 1987 Base

(dollars in thousands)

	1987 Base	1987 Estimate	Difference
$	6,796	5,106	-1,690
(FTE-T)	(150)	(127)	(-23)

The decrease of $1,690,000 and 23 FTE will be accomplished by eliminating the commercial forest management program in Colorado, Montana and Wyoming, and by reducing by 50 percent the commercial forest management program in Idaho. This will result in the Bureau's focusing the public domain commercial timber management effort on 600,000 acres and a resulting timber sale program of 60 million board feet. The Bureau's fuelwood and backlog reforestation program will not be reduced at the Estimate funding level.

The purpose of this reduction is to eliminate from the Bureau's commercial timber management program those areas where sale of timber does not produce any significant economic return when compared to the cost of preparing and administering timber sales.

The Bureau will continue its woodland management, reforestation backlog reduction work and monitoring of forest land areas at the 1986 levels of effort. These activities will not be reduced in this decrease.

The following table displays workload accomplishments for 1985 and estimates for 1986 and 1987 Base and Estimate:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc.(+) or Dec.(-)
Inventory (000's of acres)	1,445	1,160	1,160	5,460	+4,300
Forest Plans Prepared (#)	60	80	80	50	-30
Timbered offered for sale (MBF)	92,615	92,000	92,000	60,000	-32,000
Other Forest Products (Permits issued)	50,213	53,240	54,000	54,000	---
Land Treatments (acres)	1,928	2,150	3,813	3,813	---
Reforestation (acres)	2,572	2,630	2,630	2,630	---
Timber Stand Improvement (acres)	4,414	879	879	879	---
Pest Control (acres)	2,108	2,240	2,340	2,340	---

Distribution of change by object class

	FTE	Amount
Personnel compensation	23	$ 628,038
Personnel benefits		100,486
Travel and transportation of persons		55,000
Transportation of things		145,000
Communications, utilities, and miscellaneous charges		100,000
Other services		441,476
Supplies and materials		170,000
Equipment		50,000
Total		$1,690,000

WESTERN OREGON

Base program

Approximately 10 percent (or 240,000 acres) of the BLM-managed forest lands in western Oregon are PD lands intermingled with the revested Oregon and California (O&C) Grant Lands and Coos Bay Wagon Road (CBWR) lands. Although the intermingled public domain lands are managed under FLPMA, the actual management practices are generally the same as those implemented for the O&C and CBWR lands.

Historically, funding for these PD lands in western Oregon has been combined with the Oregon and California Grant Lands Fund (separately appropriated) to manage all BLM-administered lands in western Oregon. The program accomplishments associated with the PD, O&C and CBWR lands in western Oregon are very closely integrated and are displayed in the O&C appropriation discussion with no distinction by land status.

Decrease from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	914	---	-914
(FTE-T)	(---)	(---)	(---)

The decrease of $914,000 results from the elimination of the historical practice of providing MLR funding support for the western Oregon public domain forest management program. Since all western Oregon forest lands are managed without regard to their land status, and timber outputs from all lands are combined and considered under the O&C appropriation, it is logical to cover all program funding within that single account as well. Thus, in 1987, the program is included in the discussion under the O&C appropriation.

Distribution of change by object class

The object class detail for the $914,000 decrease is as follows:

	Amount
Other services	$914,000

Justification of Program and Performance

Activity: Renewable Resources Management
Subactivity: Range Management

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Wild Horse and Burro	$	16,964	16,234	16,950	15,200	-1,750
Management	(FTE/T)	(130)		(130)	(125)	(-5)
Grazing	$	30,636	29,319	30,515	30,860	+345
Management	(FTE-T)	(775)		(775)	(780)	(+5)
Total	$	47,600	45,553	47,465	46,060	-1,405
Requirements	(FTE-T)	(905)		(905)	(905)	(---)

Impact of P.L. 99-177

	1986 Enacted To Date	P.L. 99-177 B.A. Cancellation	1986 Adjusted Approp.
Range Management	47,600	-2,047	45,553

The P.L. 99-177 cancellation of $2,047,000 will result in a $730,000 reduction in wild horse and burro management funds available during 1986. This will result in 1,732 fewer animals being removed from the Federal range in 1986. This lower number of removals proportionately reduces the number of animals held in maintenance facilities pending adoption.

The $1,317,000 reduction in grazing management will delay preparation of 20 activity plans and will extend the time necessary to implement measures to correct or improve rangeland conditions. Additionally, 45 improvement projects will be dropped. Project planning to support the range improvement program will not be impacted.

Authorization

43 U.S.C. 1711, 1732, 1751, 1753 P.L. 94-579	The Federal Land Policy and Management Act of 1976 authorizes range management, rehabilitation, protection, improvement, planning, and administration on the basis of sustained yield. It also requires the preparation and maintenance of an inventory of public land resources on a continuing basis.

43 U.S.C. 1901-1908 P.L. 95-514	The Public Rangelands Improvement Act of 1978 requires the improvement of the condition of public rangelands, research on wild horse and burro population dynamics, and other range management practices.
43 U.S.C. 315 P.L. 73-482	The Taylor Grazing Act of 1934, as amended, provides for the regulation of livestock grazing, improvement of the productive capacity of the public range, and stabilization of the livestock industry.
42 U.S.C. 1241-1243 P.L. 90-583	The Carlson - Foley Act of 1968 authorizes the agency to reimburse States for expenditures associated with coordinated control of noxious plants.
42 U.S.C. 4321, 4331, 4335, and 4341-4347 P.L. 90-190	The National Environmental Policy Act of 1969 requires the preperation of an environmental impact statement for any Federal project which may have a significant effect on the environment.
7 U.S.C. 1012-1013A P.L. 75-210	The Farm Tenant Act of 1937 ("Bankhead-Jones Act") provides for management of acquired farm tenant lands.
16 U.S.C. 1331-1340 P.L. 92-195	The Wild Free-Roaming Horse and Burro Act of 1971, as amended, provides for the management, protection and control of wild horses and burros on public lands.
41 U.S.C. 501 P.L. 95-224	The Federal Grant and Cooperative Agreement Act of 1977 distinguishes Federal grant and cooperative agreement relationships from Federal procurement relationships and establishes government-wide criteria for selection of appropriate legal instruments to achieve uniformity in the use of such instruments by the executive agencies.

WILD HORSE AND BURRO MANAGEMENT

Objectives

The objectives of the wild horse and burro program are to:

- Manage animals consistent with land use planning decisions and implement efforts to achieve the appropriate management level, which is estimated to be 21,000 wild horses and 4,000 wild burros;
- Dispose of 13,500 excess wild horses and burros in a humane and efficient manner by destruction of old, sick, or lame animals within 24 hours of capture and by offering healthy excess animals for adoption within 30 days of capture and;
- Protect and manage wild horses and burros through implementation of herd management area plans and monitoring of 200 herd areas.

Base program

The base funding level for the wild horse and burro management program is $16,950,000 and 130 FTE's.

An estimated 37,000 wild horses and 8,000 wild burros will inhabit approximately 200 herd areas on public lands at the start of 1987, which is 5,000 fewer animals than at the start of 1986. These herds typically occupy areas in common with wildlife species and livestock; the numbers of each to be managed in the long-term are determined through the resource management planning process based on the availability of habitat requirements such as forage and water. Land use decisions allocating numbers are subsequently monitored and adjusted if necessary. Based on the results of resource management plans, it is estimated that public lands will support approximately 21,000 wild horses and 4,000 wild burros on about 200 herd management areas. Herd management area plans will be prepared for all herd management areas to guide the management of individual herds and habitats, including monitoring requirements.

All healthy animals removed from the public lands are made available for adoption to qualified applicants for a standard fee. During 1987, adoption fees for horses will continue at $125 and the fee for burros at $75 per animal. These fees are deposited in the Bureau's "Service Charges, Deposits, and Forfeitures" appropriation and are available for use by the Bureau to operate the wild horse and burro adoption program.

Rulemaking was published in May 1984 to waive or adjust the current adoption fee for those animals not considered adoptable under existing fees. Although this rule has been successful in promoting the adoption of over 2,900 animals in 1985, the proportion of less desirable, old or otherwise non-adoptable animals remaining in maintenance facilities is expected to increase significantly in 1986 and 1987.

Legislation was introduced in the 98th Congress which, had it been enacted, would have granted BLM authority to sell any excess animals for which there is no adoption demand. The 1987 budget is based on the assumption that sale authority will not be enacted. Thus, the number of animals maintained in long-term holding facilities will continue to increase throughout 1986 and is expected to result in about 12,500 animals being cared for at the start of 1987.

At the 1987 Base funding level, BLM would remove 7,800 excess animals, a rate that would reduce herd populations by 1,000 animals. All animals removed as well as about 1,000 animals being held in maintenance facilities would be offered for adoption. Although the Base funding level is very near the 1986 level, fewer animals could be removed in 1987 because a proportionately larger percentage of the available funds would be used to feed and care for animals in maintenance facilities.

Decrease from 1987 Base

(dollars in thousands)

	1987 Base	1987 Estimate	Difference
$	16,950	15,200	-1,750
(FTE-T)	(130)	(125)	(-5)

The proposed decrease of $1,750,000 and 5 FTE is the result of redirection of the Wild Horse and Burro program emphasis for 1987. It is apparent that it will be necessary to reduce long-term maintenance costs, and the only way to do that is to reduce the average number of horses in BLM contract facilities. To accomplish this, the Bureau will put increased effort on adopting animals and will remove fewer animals from the range. This emphasis is expected to increase the number of fee waivers granted, but it will significantly decrease BLM's maintenance costs in 1987 and future years.

The following is a comparison of workloads for 1985, 1986, and 1987.

Workload Measures	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Herd management area plans implemented	26	9	8	8	---
Herd areas monitored	146	119	110	110	---
Animals removed	18,959	14,030	7,800	4,500	- 3,300
Animal disposition					
Adoption	9,554	9,350	9,300	13,300	+ 4,000
Sale	---	---	---	---	---
Deaths	1,300	1,400	780	600	-180
Animals maintained in contract corrals (average)	4,000	12,000	11,300	7,936	- 3,364
Animals titled	3,415	5,000	5,000	5,000	---
Compliance checks	400	400	400	400	---
Animals maintained (EOY)	10,000	14,000	10,600	3,466	- 7,134
Population (EOY)	50,420	45,368	44,210	47,510	+ 3,300

Distribution of change by object class

The object class detail for the proposed decrease of $1,750,000 is as follows:

	FTE	Amount
Personnel compensation	5	$ 136,530
Personnel benefits		21,830
Travel and transportation of persons		40,000
Transportation of things		200,000
Other services		1,041,420
Supplies and materials		240,000
Equipment		50,000
Total		$1,750,000

GRAZING MANAGEMENT

Objectives

The major objectives of the grazing management program are to:

- Provide for the orderly use and administration of livestock grazing on public lands by issuing 27,000 grazing permits, leases, or allotments under the principles of multiple use and sustained yield, consistent with appropriate stocking levels determined from the best available information;
- Meet the court-mandated schedule for preparing and filing the remaining livestock grazing environmental impact statements (EIS's) by 1988;
- Establish an ecological site data baseline for management decisions, monitoring studies and determining range condition and trend by 1991;
- Categorize allotments through resource management planning and set priorities for management and development of areas designated for grazing (grazing allotments);
- Develop and implement grazing management plans for "I" category allotments within 5 years following the land use or grazing EIS record of decision;
- Encourage participative management with livestock operators who have demonstrated good rangeland management practices and provide incentives for private investments in range improvements on the public lands;
- Conduct monitoring studies on 7,100 allotments to assist in determining proper stocking levels and to evaluate the effectiveness of management actions in achieving resource management objectives; and
- Maintain cooperative programs with States and counties for noxious weed control on public lands.

Base program

Base funding for the grazing management program is $26,313,000 and 773 FTE.

BLM issues about 27,000 grazing permits, leases or allotments annually to authorize grazing for the 4.3 million cattle, sheep, goats, and horses that depend on 170 million acres of public lands for all or part of their yearly forage requirement. Administration of the permits and leases includes supervision of the licensed annual use to ensure compliance with the stated numbers, time periods, terms, and conditions. Approximately 95 workyears are required to conduct this use supervision.

A court ruling on the Natural Resources Defense Council (NRDC) et. al. v. Morton et. al. case required BLM to prepare 144 grazing EIS's by 1988. By the end of 1986, 133 grazing EIS's will have been completed. Four EIS's are scheduled for completion during 1987 leaving only 6 more to be completed in 1988. Ecological site inventories will be conducted on 8 million acres to meet planning requirements for the EIS schedule as well as for baseline data to support monitoring. As a result of winding down the EIS schedule, base funding of approximately $500,000 will be shifted from grazing EIS workload into monitoring.

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Increase from 1987 Base

(dollar amounts in thousands)

	1987 Base	1987 Estimate	Difference
$	30,515	30,860	+345
(FTE-T)	(775)	(780)	(+5)

An increase of $345,000 and 5 FTE is proposed at the 1987 Estimate level.

The increase will be used to accomplish Range Improvement (RI) project planning, e.g., general reconnaissance, preliminary site analysis, environmental assessments (EA's), and cultural and threatened and endangered (T/E) species clearances related to expending RI funds. The Bureau has not been able to expend all RI funds in each year since 1982, and a carryover of about $2,800,000 into 1987 is expected. Completion of RMP's and grazing EIS's has placed greater emphasis on the need for development of grazing plans and completion of on-the-ground range improvements. As a result, the Bureau has implemented a policy of using grazing management funds for project planning while relying on the Range Improvement Fund to finance actual project construction and development.

The following is a comparison of actual workloads for 1985 and estimated accomplishments for 1986, 1987 Base, and 1987 Estimate levels:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Inventory (000's acres)	8,400	8,200	6,100	6,100	---
EIS's completed (#)	19	13	4	4	---
Grazing plans (plans completed)	215	260	260	260	---
Monitoring (allotments monitored)	4,700	4,860	4,925	4,925	---
Lease and permit administration (# issued)	27,500	27,500	27,500	27,500	---
Project development (# developed)	223	75	75	75	---
Project maintenance (# maintained)	120	60	60	60	---
Weed control (# projects)	5	5	5	5	---

Distribution of change by object class

The object class detail for the proposed increase of $345,000 is as follows:

	FTE	Amount
Personnel compensation	5	$ 136,500
Personnel benefits		21,800
Travel and transportation of persons		16,000
Transportation of things		60,000
Other services		75,700
Supplies and materials		35,000
Total		$ 345,000

Justification of Program and Performance

Activity: Renewable Resources Management
Subactivity: Soil, Water, and Air Management

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	16,391	15,686	16,299	14,469	-1,830
(FTE-1)	(290)		(290)	(278)	(-12)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Soil, Water and Air Mgmt.	16,391	-705	15,686

As a result of the $705,000 PL 99-177 reduction, soil surveys will be reduced by 400,000 acres; watershed inventories will be reduced by 2.5 million acres; 2,000 less water sources will be quantified; and monitoring of watershed conditions will be reduced by 150 stations. This work is primarily labor intensive thus requiring the Bureau to decrease temporary employment and funding provided to USDA Soil Conservation Service for work done under cooperative agreement. In addition, watershed improvement projects will be decreased by 60; and maintenance of existing watershed projects will be reduced by 30. None of the work that would be deferred would threaten life or property. This work is primarily done by contract.

Authorization

43 U.S.C. 1701, 1711 P.L. 94-579	The Federal Land Policy and Management Act of 1976 provides for management of the public lands in a manner that will protect the quality of scientific, ecological, environmental, air and atmospheric, and water resource values; and the preservation and protection of certain lands in their natural condition. It also requires preparation and maintenance of an inventory of public land resources and other values on a continuing basis and compliance with applicable State and Federal air and water pollution control laws.
43 U.S.C. 315 P.L. 73-482	The Taylor Grazing Act of 1934, as amended, provides for the study of erosion control and development of improvements necessary to maintain an increased water supply.
33 U.S.C. 404 P.L. 95-217	The Clean Water Act of 1977, as amended, requires BLM to participate in State and Federal water quality planning and permitting activities which require exchanging data, resource planning, revising standards, and developing best management practices for the control of non-point source pollution.

43 U.S.C. 1901 et seq. P.L. 95-514	The Public Rangelands Improvement Act of 1978 provides for improving the condition of the public rangelands. It calls for the inventory and monitoring of current conditions and trends of public rangelands. Improvements include any program to provide water, stabilize soil and water conditions, and provide habitat for livestock and wildlife.
42 U.S.C. 201 P.L. 95-190	The Safe Drinking Water Act Amendments of 1977 amended Section 2 of the Safe Drinking Water Act to require compliance with all Federal, State, or local statutes for safe drinking water.
43 U.S.C. P.L. 98-569	Colorado River Basin Salinity Control Act Amendment of 1984, amends Section 203 of the Colorado River Basin Salinity Control Act and directs the Department of the Interior to undertake research and develop demonstration projects to identify methods to improve the water quality of the Colorado River. The amendment requires BLM to develop a comprehensive salinity control program and supply a corresponding report to Congress by July 1, 1987 and to undertake advanced planning on the Sinbad Valley Unit.
33 U.S.C. 467 P.L. 92-367	National Dam Inspection Act of 1972, requires the Secretary of the Army, acting through the Chief of Engineers, to carry out a dam inspection program to protect human life and property. The Secretary establishes a comprehensive national program of inspection and regulation and coordination of responsibilities assumed by Federal agencies. BLM is responsible for collecting data on dams on public lands of 25 feet or more in height which impound 50 acre-feet of water or more.
16 U.S.C. 2001 P.L. 95-192	The Soil and Water Resources Conservation Act of 1977 provides for the conservation, protection and enhancement of the Nation's soil, water, and related resources for sustained use.
42 U.S.C. 7401-7642 P.L. 95-95	The Clean Air Act of 1977, as amended, requires BLM to protect air quality, maintain Federal-and State-designated air quality standards and abide by the requirements of the State implementation plans.
42 F.R. 26951 E.O. 11988	Executive Order 11988, Floodplain Management, May 24, 1977, provides for the restoration and preservation of natural and beneficial floodplain values on the public lands.
42 U.S.C. 6901 P.L. 94-580	The Resource Conservation and Recovery Act (RCRA) of 1976 authorizes EPA, by regulation, to manage hazardous wastes on active disposal operations. The Act waives sovereign immunity so Federal agencies are subject to all State and local requirements developed under EPA's guidelines.

42 U.S.C. 9601 P.L. 96-510	The Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, as amended, provides for liability, compensation, emergency response, and cleanup (including the cleanup of inactive sites) for hazardous substances. It requires Federal agencies to report sites where hazardous wastes are or have been stored, treated, or disposed of. Federal agencies are also expected to require cleanup by responsible parties or to use direct appropriations for this purpose.
46 F.R. 42237 E.O. 12316	Executive Order 12316, Responses to Environmental Damage, August 14, 1981, assigns agency responsibility for hazardous waste spills, abatement actions and liability and financial responsibility.
43 FR 47707 E.O. 12088	Executive Order 12088, Federal Compliance with Pollution Control Standards, October 17, 1978, sets the requirements for standards applicability, agency coordination and limits on exemptions from standards.

Objectives

The major objectives of the soil, water, and air management program are to:

- Conduct soil surveys to provide baseline data to ensure that management objectives and actions are consistent with resource capability and to meet the court-mandated grazing EIS schedule;
- Provide soil, water and air resource information and technical expertise for use in planning, development, and management of BLM multiple-use programs such as energy, minerals, forest and range management;
- Develop and maintain watershed improvements designed to reduce erosion, control salinity, minimize flood and sediment damage, and stabilize and improve riparian areas;
- Provide for the legal availability of water of sufficient quantity and quality on public lands for multiple-use needs by filing for water rights in compliance with State law;
- Ensure compliance with Federal, State, and local air and water quality standards and regulations in a practical, expeditious and environmentally sound manner; and
- Identify and prepare land status assessments of hazardous waste sites to assess and rank their risks.

Base program

The FY 1987 Base funding level for the soil, water, and air management program is $16,299,000 and 290 FTE.

This program provides basic data and technical expertise for soil, water and air resources and hazardous waste management. The program includes monitoring efforts to determine the effectiveness of BLM management programs on the public land watersheds and airsheds, and to determine if management actions and investments are achieving the intended objectives while meeting required water and air quality standards. Watershed planning, development, and maintenance provides for stabilizing soils, improving water quality through land treatment or development projects, reducing soil loss and erosion through placement of retention structures, and protecting public health and safety.

Hazardous waste management integrates and coordinates a range of activities needed for prudent management of hazardous wastes on public land and the protection of public health and safety from the effects of these wastes.

Watershed inventories will be completed on 7.5 million acres of public land. This baseline data provides information on soil erosion, sedimentation, and water quality and quantity. The results are used to determine watershed condition and to establish priorities for management actions resulting from land use planning.

Soil surveys which assess the productive capability of the land and provide interpretations of soil productivity will be completed on 5.6 million acres, which is adequate to meet the court-mandated grazing EIS schedule. By the end of 1987, 150 million acres of public land will be covered by soil surveys, which is 87 percent of the total targeted acreage.

In response to water rights adjudications in various Western States, BLM will be quantifying and identifying associated public land management uses on 6,200 water sources. This information will be used to file an estimated 5,000 water right claims in compliance with State law where adjudication of water for beneficial uses is being done.

The air program will operate 90 monitoring stations to provide data on climatic conditions and air quality for BLM planning and EIS efforts, and to support operational activities such as grazing, prescribed burning, smoke management, fire rehabilitation, and energy and minerals development. With increased use of prescribed burns in forest management and rangeland activities, more emphasis is being placed on modeling for smoke management.

As a cooperative member of the Interagency Task Force on Acid Precipitation, the BLM will spend $100,000 to operate 15 acid rain monitoring stations in the Western United States. This is an increase of $20,000 over 1986 and would result in 2 additional dry deposition monitoring stations. Data obtained from this effort is used to determine baseline conditions and to assess the significance of acidic deposition in support of the Federal Acid Rain Program objectives of determining nationwide trends and impact assessments.

The program also assesses needs, develops plans, and implements watershed improvement projects to control erosion, runoff, flooding, and salinity and to improve water quality. The 1987 program will emphasize maintenance of projects currently in good condition, correction of unsafe or deteriorating watershed conditions, and protection of human safety and property. BLM, as the primary beneficiary, has assumed maintenance of these projects. This is in line with the Bureau Rangeland Improvement Policy of assigning structural improvement maintenance to the benefiting parties.

Watershed monitoring will be conducted at 1,750 stations to determine if activity plan objectives are being met. Monitoring will also be conducted at 900 stations to determine changes in water quality and quantity in specific watersheds or sensitive environmental areas.

Construction of 280 new watershed improvement projects is the same level as 1986. Major emphasis continues to be placed on maintenance of existing projects. Activity plans following completion of land use planning are developed to ensure that funds are targeted to those areas of highest priority and where the greatest benefits can be derived.

The Bureau plans to continue to inspect and evaluate dam structures on public lands to ensure that they are safe and do not have the potential to endanger life or property. We plan to complete 10 rehabilitation projects on structures identified as needing repair.

Hazardous waste management program efforts are focused on developing program policies and procedures; finding, evaluating and initiating cleanup on the most pressing past problem sites; implementing systems to control current incidents; and developing procedures to reduce future risks and liabilities to BLM in connection with routine Bureau operations or permitting actions. It is Bureau policy that on sites where there is a known, viable responsible party, that party must pay the cost of any cleanup actions needed.

The 1987 hazardous waste management Base program is $1,782,000. About half of the funds will be used for site inventory and identification, site assessment and ranking, cleanup studies and plans, limited-site cleanup, litigation support to recover costs and damages, and to maintain current levels of emergency response capability. Additionally, some of the funding will be used to respond to emergency cleanup situations such as illegal dumping of chemical wastes, abandoned cyanide containers, pesticide disposals, etc. An increase in emergency incidents due to illegal dumping is anticipated due to higher legal disposal costs and expanded regulatory efforts by EPA and the States. The remainder of the funds will be used to initiate hazardous waste control activities, develop policies and procedures needed to reduce future costs and liabilities, provide programmatic and safety training to BLM employees, and ensure compliance with the laws. No funding is included for major site cleanup.

Decrease from FY 1987 Base

(dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	16,299	14,469	1,830
(FTE-1)	(290)	(278)	(-12)

The decrease of $1,830,000 and 12 FTE will result in reduced activity in various parts of the program.

Inventory of watershed condition will be reduced by 4 million acres and soil surveys by 600,000 acres. These inventories have been decreasing as planning and grazing EIS's phase down. The net effect will be to extend target dates for completion of the last remaining soil surveys from 1989 to 1991 which will not affect Bureau commitments to planning or the grazing EIS schedule.

The Bureau will reduce the number of sources quantified for water rights by 3,200. Reducing this effort will not adversely affect the Bureau's objective of providing legal availability of water for multiple use as the actual filing for water rights in compliance with State law is the most important aspect of the program, and the Bureau will be maintaining this portion of the program.

Reducing watershed activity plans will not adversely affect the program as plans have already been developed on the most critical areas. These plans provide the basis for funding of new improvements. Plans already written were selected by managers on the basis of correcting unsafe or deteriorating watershed conditions, and for protection of human health and property. In general, the Bureau will place emphasis on monitoring watershed conditions, maintaining existing projects, and constructing only these projects where the most benefit can be derived.

There will be no reduction to the hazardous waste management program which will be continued at the 1987 Base level.

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-)
Inventory (000's acres)	9,620	7,500	7,500	3,500	-4,000
Soil survey (000's acres)	6,500	5,600	5,600	5,000	-600
Water rights sources quantified	7,995	6,200	6,200	3,000	-3,200
Air monitoring (# stations)	63	88	90	90	---
Watershed activity plans (#)	66	50	50	25	-25
Monitoring (# stations)	2,725	2,650	2,650	2,650	---
Watershed improvements (#)	385	280	280	105	-175
Project maintenance (#)	282	280	280	200	-80
Dam safety (# projects)	13	10	10	10	---
Hazardous waste:					
Inventory (000's acres)	40,000	7,000	7,000	7,000	---
Land status assessment (# sites)	70	85	85	85	---
Hazardous waste cleanup (# sites)	35	42	42	42	---

Distribution of change by object class

The object class detail for the proposed decrease of $1,830,000 is as follows:

	FTE	Amount
Personnel compensation	12	$ 327,700
Personnel benefits		52,400
Travel and transportation of persons		50,000
Transportation of things		60,000
Printing and reproduction		10,000
Other services		914,900
Supplies and materials		65,000
Equipment		50,000
Land and structures		300,000
Total		$1,830,000

Justification of Program and Performance

Activity:	Renewable Resources Management
Subactivity:	Wildlife Habitat Management

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	16,054	15,364	15,961	13,801	-2,160
(FTE-T)	(320)		(320)	(300)	(-20)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Wildlife Habitat Management	16,054	-690	15,364

As a result of the $690,000 P.L. 99-177 reduction, the revision of 20 habitat management plans (HMP's) and Bureau involvement in 11 recovery plans for threatened and endangered (T/E) species will be deferred. Savings will be made from not hiring temporary employees to assist in such work. In addition, implementation of HMP's and recovery plans will result in decreases in contracted work for habitat improvement projects and maintenance on projects.

Authorization

43 U.S.C. 1701, 1751 P.L. 94-579	The Federal Land Policy and Management Act of 1976 identifies fish and wildlife development and utilization as a major use of the public lands; directs that the public lands be managed to provide food and habitat for fish and wildlife; authorizes the use of Range Improvement funds for the protection, maintenance, rehabilitation, improvement, and management of wildlife habitat, and provides for the preparation and maintenance of an inventory of public land resources on a continuing basis.
16 U.S.C. 715 P.L. 70-770	The Migratory Bird Conservation Act of 1929, as amended, and treaties pertaining thereto, provide for habitat protection and enhancement of protected migratory birds.
16 U.S.C. 1531 et seq. P.L. 93-205	The Endangered Species Act (ESA) of 1973, as amended, directs Federal agencies to ensure that their actions do not jeopardize threatened and endangered (T/E) species and to help bring about their recovery.

16 U.S.C. 670 et seq. P.L. 93-452	The Sikes Act of 1974, as amended, provides for the conservation, restoration, and management of species and their habitats in cooperation with State wildlife agencies.
43 U.S.C. 315 P.L. 73-482	The Taylor Grazing Act of 1934, as amended, provides for wildlife management on public lands.
43 U.S.C. 1901 et seq. P.L. 95-514	The Public Rangelands Improvement Act (PRIA) of 1978 directs that the condition of the public rangelands be improved so that they become as productive as feasible for wildlife habitat and other rangeland values.
42 F.R. 26951 EO 11988	Executive Order 11988, Floodplain Management (May 24, 1977) provides for the restoration and preservation of national and beneficial floodplain values on the public lands.
42 F.R. 26961 EO 11990	Executive Order 11990, Protection of Wetlands (May 25, 1977) directs that wetland and riparian habitats on the public lands be identified, protected, enhanced, and managed.
16 U.S.C. 3101 et seq. P.L. 96-487	The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 provides for the special designation of certain public lands in Alaska and conservation of their fish and wildlife values; management for subsistence uses of fish and wildlife resources on public lands by residents of rural Alaska; and protection of the wildlife resources on North Slope lands impacted by oil and gas exploration and development activities.
30 U.S.C. 1201 et seq. P.L. 95-87	The Surface Mining Control and Reclamation Act of 1977 provides that lands may be declared unsuitable for surface coal mining where significant adverse impacts could result to certain wildlife species.

Objectives

The major objectives of the wildlife habitat management program are to:

- o Conduct wildlife habitat inventories to provide data for resource management planning, preparation of habitat management plans (HMP's), and resolution of conflicts involving resource development and protection activities;
- o Prepare and implement HMP's to address fish and wildlife habitat development and protection needs identified through the land use planning process;

- Monitor 868 plans or agreements to determine change or trend in regard to habitat development and protection objectives specified in activity plans; and

- Ensure compliance with the statutory requirements of the Endangered Species Act (ESA) by conducting inventories of threatened and endangered (T/E) species habitat; assisting in the preparation of recovery plans and implementation of recovery plans and management plans; and monitoring habitats to ensure that objectives for T/E habitat development and protection are being met.

Base program

The base program of $15,961,000 and 320 FTE provides for the protection and management of fish and wildlife habitat on public land, including habitats of T/E species of fish, wildlife and plants.

Two primary aspects of the BLM wildlife habitat management program are to provide pertinent data and expertise in land use decisionmaking processes, and to develop and protect wildlife and fish habitats on the public lands pursuant to the objectives specified in resource management plans (RMP's) and HMP's. Major workloads include habitat inventory, monitoring, HMP preparation, and habitat improvement project development and maintenance.

The need for doing extensive habitat inventories on public lands continues to decline while the need for conducting more intensive site- or species-specific inventories continues steady. At the 1987 base level, inventories covering approximately 9.5 million acres of wildlife habitat provide data for the preparation of grazing EIS's, RMP's, HMP's, and other activity plans with objectives involving habitat development or protection.

Monitoring efforts on habitat areas are increasing as more land use plans, grazing EIS's, and activity plans are completed. At the base level, 862 plans or agreements would be monitored to determine wildlife resources trend and assess progress toward meeting habitat development and protection objectives.

Sixty-six new HMP's can be written or updated as part of the base program. However, the Bureau's need for the preparation of new HMP's is declining while more emphasis is placed on implementation of projects in existing HMP's.

Approximately 570 habitat projects can be developed, and maintenance activity for nearly 1,200 existing projects is possible at the base level. Some of these accomplishments involve the use of contributed funds, materials, and labor from State agencies and private groups to help support BLM's habitat development efforts, such as the cooperative Desert Bighorn Sheep management program. The estimated total value of these contributions in 1987 is $1,500,000.

The base program includes support for work on 12 research and development projects. Research projects are systematic, intensive investigations directed toward obtaining data needed to solve habitat development or protection problems faced by the Bureau. Developmental projects involve the orderly process of using research data and other available information to produce materials, devices, systems, or methods for habitat management.

In 1987, the public lands will provide part or all of the habitat requirements for approximately 135 T/E plant and animal species. Also, on the public lands there occur several hundred species listed by the Fish and Wildlife Service (FWS) as either proposed or candidate species, which means they are being considered for listing as threatened or endangered.

The Bureau's T/E species management program is designed to comply with the Endangered Species Act requirements to avoid jeopardizing T/E species and help bring about their recovery. The 1987 base level provides $2,650,000 for T/E species work. Emphasis is on maintaining the collection of baseline data to implement management plans, and on activities to help prevent proposed or candidate species from being listed as threatened or endangered. The 1987 base can provide for inventory of 3.4 million acres of T/E species habitat. The data are used to ensure that Bureau actions do not jeopardize T/E species, while ensuring that other resource development programs move ahead without unnecessary delays. In addition, 225 RMP's, activity plans, T/E recovery plans, or other activity plans or agreements involving T/E species habitats can be monitored.

The 1987 base program includes BLM involvement in the preparation of 17 recovery plans. These plans, prepared under the auspices of the FWS, identify the work that must be accomplished to bring about de-listing and what each agency's responsibilities are in the recovery process. BLM then develops management plans to accomplish the Bureau's portion of the recovery efforts. At the base level, the Bureau can also prepare 20 management plans for T/E species that are not yet covered by a recovery plan and for selected proposed and candidate species, and provide support for implementing 89 T/E recovery and management plans.

Decrease from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	15,961	13,801	-2,160
(FTE-T)	(320)	(300)	(-20)

An decrease of $2,160,000 and 20 FTE is proposed for 1987.

A reduction of $860,000 can be made by decreasing the amount of extensive inventory work, reducing the number of new HMP's written by 44, and reducing the level of implementation and maintenance on HMP's involving non-crucial habitat. Deferring this work will not adversely affect habitats as HMP's have been developed on most of the critical areas, and managers have placed emphasis on implementing those plans. In addition, increased emphasis will be placed on monitoring the existing and new plans to ensure plan objectives are actually being met.

A reduction of $1,000,000 in recovery and management plan implementation will not adversely affect the Bureau's meeting its requirements under the T/E Species Act. The Bureau will continue to inventory T/E species habitat to obtain baseline data on critical habitats at the base level and will increase monitoring to ensure that recovery plan implementation meets the objectives for species recovery.

The remaining decrease of $300,000 can be obtained from a return to the pre-1985 level of funding for habitat improvement and maintenance work for the Desert Bighorn Sheep. Congress gave the Bureau this additional funding level in 1985 and 1986 to experiment with a matching fund program involving States and private organizations. Though this program has been fairly successful, it has served its purpose. The Bureau has completed the highest priority projects in current management plans, and believes that planning and development efforts benefiting Bighorn Sheep can now be handled within the regular Wildlife program.

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc.(+) or Dec.(-)
Inventory (000 acres)	14,500	9,535	9,535	9,000	-535
Monitoring (# plans)	750	862	862	884	+22
HMP's written/revised (#)	67	66	66	22	-44
Projects developed (#)	570	570	570	420	-150
Projects maintained (#)	1,100	1,190	1,190	612	-578
Research and development projects (#)	16	12	12	12	---
T/E inventory (000 acres)	3,800	3,155	3,388	3,388	---
T/E monitoring (# plans)	200	225	225	244	+19
T/E plans written (# w/BLM involvement)	36	35	37	19	-18
T/E plans implemented	81	85	89	49	-40

Distribution of change by object class

The object class detail for the proposed decrease of $2,160,000 is as follows:

	FTE	$ Amount
Personnel compensation	20	$ 546,000
Personnel benefits		87,000
Travel and transportation of persons		55,000
Transportation of things		80,000
Other services		900,000
Supplies and materials		150,000
Equipment		100,000
Lands and structures		242,000
Total		$2,160,000

Justification of Program and Performance

Activity: Renewable Resources Management
Subactivity: Recreation Management

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Cultural Resources	$	6,043	5,783	6,018	5,078	-940
Management	(FTE-T)	(125)		(125)	(120)	(-5)
Wilderness	$	7,280	6,967	7,254	7,254	---
Management	(FTE-T)	(150)		(150)	(150)	(---)
Recreation	$	8,074	7,727	8,042	7,198	-844
Resources Mgmt.	(FTE-T)	(190)		(190)	(180)	(-10)
Total	$	21,397	20,477	21,314	19,530	-1,784
Requirements	(FTE-T)	(465)		(465)	(450)	(-15)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Recreation Management	21,397	-920	20,477

A reduction of $920,000 will have the following program impacts:

- o The Anasazi Heritage Center, scheduled to open in 1986, will operate on a restricted schedule;
- o A long-range study of Fossil Forest will be deferred;
- o The printing and filing of 6 final wilderness environmental impact statements will be delayed;
- o Recreation permit compliance monitoring and patrol will be reduced; and
- o There will be a decrease in resource protection projects.

Authorization

43 U.S.C. 1701 et seq. P.L. 94-579	The Federal Land Policy and Management Act (FLPMA) of 1976 identifies recreation as a major use of public lands, and

- requires protection of scientific, scenic, historical, ecological, and archaeological values; preservation and protection of certain public lands in their natural condition; and provision for outdoor recreation, human occupancy, and use of the public lands;

43 U.S.C. 1711	- requires preparation and maintenance of an inventory of public land resources on a continuing basis;
43 U.S.C. 1712	- directs that areas of critical environmental concern be given priority in the inventory of public lands, in the development and revision of land use plans, and in applying special protective management;
43 U.S.C. 1781	- provides for the management of the California Desert Conservation Area and implementation of the Desert Plan; and
43 U.S.C. 1782	- requires Secretarial review of all roadless areas of 5,000 acres or more and roadless islands on the public lands having wilderness characteristics and submission of recommendations to the President by 1991 concerning their suitability or nonsuitability for wilderness designation (section 603(a)).
16 U.S.C. 432 P.L. 59-209	The Antiquities Act of 1906 provides protection of cultural resources on all Federal land and imposes penalties against those who excavate or appropriate these values without an antiquity permit.
16 U.S.C. 1271 P.L. 90-542	The Wild and Scenic Rivers Act of 1968, as amended, provides for the development and management of certain rivers under BLM's jurisdiction for recreational purposes.
16 U.S.C. 1241-1249 PL 90-543	The National Trails System Act of 1968, as amended, establishes a national trails system which includes 20 trail segments under BLM's jurisdiction.
16 U.S.C. 1242 1243 P.L. 95-625	The National Parks and Recreation Act of 1978 establishes a number of national historic trails which cross public lands.
16 U.S.C. 460y P.L. 91-476 P.L. 95-352	The King Range Act of 1970, as amended, provides for management and development of the King Range National Conservation Area for recreational and other multiple-use purposes.
16 U.S.C. 1131 et seq. P.L. 88-577	The Wilderness Act of 1964 provides for the designation and preservation of wilderness areas.
42 U.S.C. 4321, 4331-4335, and 4341-4347 P.L. 91-190	The National Environmental Policy Act of 1969 established the continuing responsibility of the Federal Government to improve Federal programs and resources to preserve important historic, cultural and natural aspects of our national heritage and to maintain an environment which supports diversity and variety of individual choice.
E.O. 11593	Protection and Enhancement of the Cultural Environment directs all Federal agencies to inventory their historic and archaeological resources and to protect those properties that have been nominated to the National Register of Historic Places.

16 U.S.C. 470 P.L. 89-665	The National Historic Preservation Act of 1966, as amended, expands protection of historic and archaeological properties to include those of national, State and local significance. It also directs Federal agencies to consider the effects of approved actions on properties listed on or eligible for inclusion in the National Register of Historic Places.
16 U.S.C. 470aa, 470cc, and 470ee P.L. 96-95	The Archaeological Resources Protection Act (ARPA) of 1979 requires permits for excavation of sites and removal of artifacts, provides protection of federally administered archaeological resources, and encourages increased cooperation among Federal and private interests to increase data on archaeological resources.
16 U.S.C. 3101 et seq.	The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 provides for the designation and conservation of certain public lands in Alaska. BLM responsibilities include six wild and scenic rivers, nine study rivers, one national conservation area, one national recreation area, and one national scenic highway.
30 U.S.C. 1201 et seq.	The Surface Mining Control and Reclamation Act of 1977 provides that lands may be declared unsuitable for surface coal mining where significant damage could result to "important historic, cultural, scientific, and aesthetic values . . . "

CULTURAL RESOURCES MANAGEMENT

Objectives

The major objectives of the cultural resources management program are to:

- Process applications, issue FLPMA, Antiquity Act, and Archaeological Resources Protection Act (ARPA) permits to conduct archaeological, historic, and paleontological investigations on public lands, and monitor approved activities;

- Provide appropriate levels of inventory and evaluation to support Bureau planning efforts;

- Manage and protect the most valuable and most critically threatened cultural, natural history, and paleontological resources;

- Provide for the scientific and educational aspects of archaeological, natural history, and paleontological resources, including hobby collection and site management; and,

- Continue to develop cooperative agreements and volunteer programs for use in cultural resource, natural history, and paleontology inventory and protection efforts. Continue to develop and implement agreements with other Federal and State agencies and private entities.

Base program

Base funding for the cultural resources management program is $6,018,000 and 125 FTE. Program responsibilities include the management of cultural resources, natural history, and paleontological programs for Bureau-administered lands and resources.

The program provides protection and management for more than half of all the cultural resources administered by the Federal Government. An estimated one-half million cultural resource properties are located on public lands, including campsites of the hemisphere's earliest inhabitants, prehistoric ruins, aboriginal rock art, early wagon roads, abandoned military posts, and historic ghost towns. In addition, BLM lands contain some of the most valuable natural science resources found on the Federal lands. These include a wide variety of areas having ecological, paleontological, and geological importance. Several statutes require BLM to locate, evaluate, and manage cultural and scientific resources on the public lands, to prevent or minimize unnecessary damage, and to accommodate appropriate uses of those resources by the scientific community and the general public.

Activity planning for cultural resources management involves developing management plans for areas of special cultural, natural, or paleontological significance and defining the most effective management for these areas. It also involves actual designation of special areas, cooperative management agreements, and project plans following completion of the Bureau's land use planning. It is anticipated that 15 sites will be nominated to the National Register of Historic Places during 1986 and 1987. Designated paleontological and natural history resources on public lands now include 60 research natural areas (RNA's), all or parts of 42 national natural landmarks (NNL's), 1 experimental ecological reserve, and 1 international biosphere reserve. Nearly 200 potential RNA's and NNL's are awaiting evaluation, planning decisions, and/or formal establishment. The BLM is actively pursuing cooperative agreements as well as the use of volunteers to increase its management capabilities for cultural, natural history and paleontological resources.

The National Historic Preservation Act (NHPA) directs BLM to take into account the effects of Federal undertakings on archaeological and historic sites. The Bureau has, therefore, developed a tiered inventory system to identify and evaluate properties. The system includes three classes of inventory: Class I, which is essentially a review and synthesis of existing information; Class II, which is a sample-type inventory used to characterize the nature and distribution of sites within a large area; and Class III, which is an intensive inventory designed to document surface features of sites. Proposed program regulations, developed in response to provisions included in 36 CFR 800.11, when final, will emphasize BLM's site evaluation system. These regulations will allow BLM to categorize sites by their management, interpretative, or scientific values, rather than the general criteria designed for the National Register of Historic Places.

In related areas, efforts continue to upgrade the quality of the cultural and paleontological resources program data bases for support of planning and project review and authorization. All BLM State offices have initiated programs to develop or upgrade existing information systems, largely through automated methods, to help define the location, extent, and sensitivity of sites on public lands. This effort is an important step in improving BLM's cultural resources management capabilities. Emphasis will also be continued on collecting existing information about known paleontological sites, which is critical to determining management and protection needs.

The Bureau will continue its efforts to carry out ARPA, the Antiquities Act, and FLPMA by reviewing and issuing permits. While the number of permits issued for archaeological and historic work will probably remain at the current level, the number of projects, specific work authorizations, and monitoring needs will most likely increase to meet specific land use demands.

Approximately 455 permits will be issued in 1987 for cultural resource research and consultation work, 60 for paleontological research, and 70 for scientific and educational use of caves. Archaeological and historic work will be approved through the issuance of permits under section 302 of FLPMA for noncollection surveys and under ARPA for surveys where sites are excavated and materials collected. The scientific permitting workload of the Bureau's paleontology program is expected to increase slightly by 1987.

Over 85 percent of all cultural resource work currently approved under ARPA, the Antiquities Act, and FLPMA is conducted on BLM-administered lands. In 1985, the Bureau implemented a new program for issuing archaeological, historic, and paleontological permits to private companies and research institutions. Responsibility for reviewing applications, approving proposed work, and monitoring permit compliance now resides with BLM field offices under this new system. This program change allows BLM to work directly with researchers and contractors undertaking cultural resource work in support of energy and land use initiatives. The Bureau is also required to provide for the management and collection of fossils as a legitimate recreational use as a result of increasing interest in these resources. Therefore, hobby collection of fossils by the public will require some control and surveillance to ensure that scientifically significant fossils are not removed or vandalized and that resources are not depleted by overzealous use. In 1985 and 1986 the Bureau has supported a National Academy of Sciences 2-year study on paleontology to investigate threats to scientifically significant fossils and develop criteria to be used in mitigating impacts.

For sites in need of a substantial, long-term protection effort, a specific management plan is often developed addressing the nature of the resource, scope of the problem(s), and proposed management solutions. Activity plans discuss a variety of protection actions that can be pursued, such as installation of signs and interpretative displays, stabilization of decaying ruins, or the erection of physical barriers to prevent further destruction. However, many sites are in need of small scale, interim measures designed to prevent imminent destruction resulting from natural or man-made factors. These measures are short-term in nature and not usually covered by an approved plan. In these cases, emphasis is placed on deterring site vandalism in an attempt to maintain the integrity of resources for further scientific study and public enjoyment.

It is anticipated that the Anasazi Heritage Center, a joint BLM and Bureau of Reclamation venture in southwestern Colorado will open during calendar year 1986. In addition to providing interpretative services and information for the public, another main purpose of the Center is to provide a curatorial facility and reference source for students of the Anasazi culture.

A major problem in cultural resources management continues to stem from the growing interest in and commercial value of artifacts, which has given rise to a sophisticated supply network and lucrative black market. During 1985, the Bureau documented over 100 cases where pothunters had deliberately damaged cultural sites on public lands to obtain artifacts for either profit or private collections. During the past two years, vandalism to important Anasazi sites located in southeastern Utah and southwestern Colorado has escalated sharply; and recently there have been reports of increased vandalism of sites in northwestern Arizona. BLM has increased its program support for law enforcement activities and site monitoring in these and other areas in an attempt to curtail this dramatic rise in site destruction. In several States, BLM has recently developed programs aimed at increasing public awareness of the serious impacts on our Nation's cultural heritage resulting from illegal site disturbance and removal of artifacts.

Decrease from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	6,043	5,078	-940
(FTE-T)	(125)	(120)	(-5)

A reduction of $940,000 and 5 FTE can be achieved with the following program changes:

- Activity planning will be delayed on 10 lower priority sites. The development of the long-range study of the Fossil Forest in New Mexico will be delayed. This is an 8-year study, however, and some delay or slow down should not jeopardize meeting the deadline. The area is covered by regulation. There will be a reduction of 1,130,000 acres of lower priority inventory. Generally this represents a reduction in nonproject specific inventory such as data encoding work and literature searches.

- Implementation of cultural resource management plans will be delayed, and cultural resource sites will continue to be protected with interim protection measures. Existing protection measures could probably be maintained at most sites with some slight adjustments in emphasis. As an example, the State of Arizona has proposed an interagency task force approach to vandalism problems associated with archaeological resources in the northwestern part of the State. Interim protection in other significant cultural resource areas can be maintained at or near existing levels.

- Operating costs for the Anasazi Heritage Center will be reduced by limiting the hours and/or days that the facility is open. A schedule will be developed that will attempt to minimize inconvenience for the public or the professional user of the facility.

The Bureau will continue to rely on the use of volunteers and the development of cooperative agreements to assist in the improvement of cultural, paleontological and natural history resources on the public lands.

The following is a comparison of actual 1985 accomplishments and planned workloads from 1986 through the 1987 Estimate level:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Inventory (000's acres)	4,373	8,130	8,130	7,000	-1,130
Research and development	1	1	1	---	-1
Activity planning	67	72	72	62	-10
Permits	560	585	585	585	---
Resource stabilization/ protection (# protected)	103	146	146	136	-10

Distribution of change by object class

The object class distribution for the decrease is as follows:

	FTE	Amount
Personnel compensation	5	$137,000
Personnel benefits		22,000
Travel and transportation of persons		40,000
Transportation of things		20,000
Communications, utilities, and miscellaneous charges		10,000
Printing and reproduction		5,000
Other services		626,000
Supplies and materials		30,000
Equipment		50,000
Total		$940,000

WILDERNESS MANAGEMENT

Objectives

The major objectives of the wilderness management program are to:

- Prepare activity plans and manage wilderness areas designated by Congress in accordance with established regulations and guidance.
- Conduct interim management on wilderness study areas (WSA's) pending completion of wilderness environmental impact statements (EIS's)/wilderness study reports (WSR's), suitability recommendations, and congressional action;
- Continue progress on wilderness study reports and wilderness environmental impact statements, including areas added as a result of Sierra Club v. Watts litigations, to meet the October 21, 1991, congressionally mandated deadline.
- Coordinate with the Geological Survey (GS) and Bureau of Mines (BM) on mineral surveys conducted in support of the wilderness program. Initiate new mineral surveys for all remaining preliminary suitable WSA's in order to meet the October 21, 1991 congressionally mandated deadline.
- Emphasize and pursue the use of volunteers and cooperative management agreements to augment interim management and wilderness management responsibilities.

1987 program

The 1987 Estimate for the wilderness management program is $7,254,000 and 150 FTE.

The wilderness review program consists of several processes by which wilderness or potential wilderness is identified, studied, protected, and managed. Portions of the program have been completed or are nearing completion, while others are expanding as the wilderness review process matures. A description of the main components of the wilderness management program is provided below.

Inventory

Wilderness inventory in the Western States (excluding Alaska) was completed in November 1980. Of the approximately 174 million acres inventoried, 150 million acres were found to lack wilderness characteristics and were released from further wilderness review. Some 25 million acres in 861 separate tracts were identified as wilderness study areas. Areas deleted from wilderness study by former Secretary Watt have been returned to wilderness review as a result of the decision in Sierra Club v. Watt.

BLM's wilderness review responsibility in Alaska was modified by the Alaska National Interest Lands Conservation Act of 1980, which exempted BLM lands in Alaska (including Halibut Cove) from wilderness review. An exception to this exemption was the direction for BLM to conduct a wilderness review by December 1988 on a gross area of approximately 4.5 million acres in the Central Arctic Management Area. A cursory inventory was completed in 1982.

Study (Plan Amendments, EIS's)

About 50 percent of the 24.8 million acres of land under wilderness review are expected to have final wilderness EIS's filed by 1987. This includes 1.6 million acres of WSA's which were reinstated into the study process by the Sierra Club v. Watt litigation that will also require plan amendments and wilderness EIS's. Areas found to have wilderness characteristics are studied to evaluate all potential resource values and uses. On the basis of these studies, BLM will develop recommendations for the Secretary on the suitability or nonsuitability of each WSA for inclusion in the National Wilderness Preservation System. The study process is integrated with BLM's planning system, and workloads are determined by the land-use planning schedule. Appropriate environmental impact statements and wilderness study reports are developed, reviewed, and transmitted for approval and decision.

Wilderness study areas are being evaluated in detail to determine whether they are suitable for preservation as wilderness areas or should be released for nonwilderness uses. BLM's wilderness studies are guided by the Wilderness Study Policy, published in the Federal Register on February 3, 1982. The document contains the planning criteria that are being used for recommendations on the suitabililty or nonsuitability of wilderness study areas for wilderness designation.

Interim Management

Section 603(c) of FLPMA also requires BLM to manage any lands under wilderness review to maintain their suitability for possible wilderness designation. The purpose of the BLM Interim Management Policy (IMP) is to protect existing wilderness values, maintain valid existing rights, and allow "grandfathered" mining, mineral leasing, and grazing activities to continue until final wilderness suitability determinations have been made. Special emphasis has been placed on the monitoring of ongoing actions within wilderness study areas to ensure that wilderness values are not impaired or unnecessarily degraded.

On April 6, 1981, the BLM Director revised the IMP to recognize all mineral leases issued prior to approval of FLPMA as having valid existing rights, thus making them eligible for full development consistent with the rights conveyed, despite the wilderness study status of the lands involved. This change was published in the Federal Register on July 12, 1981 (48 FR 31854). In December 1982, the Secretary directed that there be no mineral leasing or permitting in BLM wilderness study areas until action is taken on their status, but that existing rights should continue to be recognized.

Wilderness Management/Wilderness Area Management Planning

Management of BLM-administered lands designated by Congress as wilderness will be guided by the regulatory procedures for management for designated wilderness areas, published in the Federal Register on February 25, 1985. The final rulemaking became effective on March 25, 1985, and is codified at 43 CFR 8560. Wilderness area management plans are developed on an interdisciplinary basis for designated wilderness areas. These plans will provide the most effective level of management for each area.

Twenty-three units of public lands administered by BLM and the Forest Service have been designated as wilderness. Four of these units are contiguous to national forest lands designated as wilderness, and administration of three of these wilderness areas was assigned to the Forest Service (FS) by Congress. The 23 units are listed in the following table:

State	Wilderness Name	Year Designated	Public Law No.	Administering Agency	Acres
Arizona	Aravaipa Canyon	1984	98-406	BLM	6,670
	Cottonwood Point	1984	98-406	BLM	6,500
	Grand Wash Cliffs	1984	98-406	BLM	36,300
	Kanab Creek	1984	98-406	BLM	8,850
	Mt. Logan	1984	98-406	BLM	14,600
	Mt. Trumbull	1984	98-406	BLM	7,900
	Paiute	1984	98-406	BLM	84,700
Arizona/ Utah	Paria Canyon Vermillion Cliffs	1984	98-406	BLM	110,000
	Beaver Dam Mountains	1984	98-406	BLM	19,600
California	Santa Lucia	1978	95-237	FS	1,733
	Ishi	1984	98-425	BLM	240
	Machesua Mountain	1984	98-425	BLM	120
	Trinity Alps	1984	98-425	BLM	4,623
	Yolla Bolly-Middle Eel	1984	98-425	BLM	8,500
Idaho	River of No Return	1980	96-312	FS	720
Montana	Bear Trap Canyon (Part of Lee Metcalf Wilderness)	1983	98-140	BLM	6,000
New Mexico	Bisti	1984	98-603	BLM	3,968
	De-na-zin	1984	98-603	BLM	23,872
Oregon	Hells Canyon	1984	98-328	BLM	1,038
	Oregon Islands	1978	95-450	BLM	5
	Table Rock	1984	98-328	BLM	5,500
	Wild Rogue	1978	95-237	FS	10,160
Washington	Juniper Dunes	1984	98-339	BLM	7,140
Total					368,739

The 1987 program reflects the transition from the study phase of the program (involving the preparation of EIS's and study reports) to the management phase for wilderness areas designated by Congress. Workload emphasis within the program is shifting from the study phase to the increasing requirements of wilderness area management. The program also continues the commitment to interim management and protection of areas under review for wilderness designation.

Resource Protection/Rehabilitation

As part of the effort to maintain the primitive and natural character of designated wilderness areas, the Bureau rehabilitates damages in wilderness. These damages may have been the result of unauthorized activities within the wilderness area including mining, off-road vehicle use, unauthorized road construction and others. Some of the activities may have occurred prior to inclusion of an area within the wilderness review process. Other activities may have been conducted after an area was included in the study process and discovered through interim management.

The following workload table compares actual 1985 accomplishments with planned accomplishments for 1986 and 1987:

FY 1985	FY 1986	FY 1987	
Workload Measure	Actual	Estimate	Estimate
Inventory (000 acres)	40	---	---
Plan amendments (#)	22	37	14 1/
Environmental impact statements (#)	24	31	26 1/
Interim management (000's acres)	24,822	24,822	24,822
Wilderness area management Plans (#) 6	15	2	
Wilderness area management (# of areas)	23	23	23
Resource protection rehabilitation projects (#)	8	12	12

RECREATION RESOURCES MANAGEMENT

Objectives

The major objectives of the recreation resources management program are to:

- o Provide management and visitor assistance in 25 of the Bureau's intensively used and nationally significant special recreation management areas;

- o Provide resource protection by continuing the BLM ranger/program (with law enforcement authority) in the California Desert Conservation Area (CA), King Range National Conservation Area (CA), Lower Colorado River (AZ), Birds of Prey Area (ID), Red Rock Canyon Recreation Lands (NV), Rio Grande Wild and Scenic River (NM), Fort Meade Recreation Area (SD), Rogue Wild and Scenic River (OR), and the Grand Gulch Area (UT);

- o Facilitate private sector use of public recreation resources, provide revenues to the Federal Government, and protect resources by issuing special recreation permits and recreation concession leases to individuals and commercial recrea- tion and tourism organizations operating on the public lands;

1/ Final EIS's and plan amendments are projected to be completed and filed in 1988 and 1989. Accomplishments associated with the decision in the Sierra Club v. Watt litigation will be reported in the outyears.

- Place continued reliance on volunteer efforts, contributed funds and cooperative management agreements to achieve planned recreation management objectives;
- Develop cooperative management agreements, prepare recreation area management plans and participate in interagency planning in high priority, intensively used areas of national significance; and,
- Continue ORV designations and implementation plans for all public lands.

Base program

Base funding for the recreation resources management program is $8,042,000 and 190 FTE.

Public demand for recreational use of Federal lands has been rising, and this trend is expected to continue through 1987. In 1984, there were over 27 million visits to Bureau-administered lands (excluding western Oregon) which totaled over 210 million visitor hours of public land recreational use. The Bureau also manages more than 300 recreation sites (33,600 acres) which include approximately 12,000 picnic and camping family units. In 1984 collections for permit areas, concessions, and fee sites totaled over $727,000. In 1984, the Bureau began reporting only visits associated with special recreation management areas and not visits to all public lands (due to the difficulty and unreliability of reporting extensive area use).

The Bureau plans for outdoor recreation use in response to issues, concerns, and problems identified in the resource management planning process. The Bureau uses the recreation opportunity spectrum (ROS) to inventory recreational resources. This system provides a uniform framework for inventory and analysis of recreation resources and uses through all phases of planning. The ROS provides for the identification of recreation opportunities, settings, and activities while also recognizing that the public land users differ in their needs and the experiences they desire. In this context, the Bureau identifies, inventories, and evaluates public recreation needs and recreation resources on the public lands to determine the allocation of resources for recreation and the extent of required services and management.

Activity planning is the generic category which includes recreation area management planning, ORV designation work, interagency planning and coordination, and development of major cooperative management and volunteer agreements.

Many unique public land recreation opportunities are made available to the public through the issuance of permits to: (1) private individuals, (2) commercial operators, (3) organizers of competitive events, and (4) promoters of large ORV events. This is an essential Bureau function because the accompanying monitoring and compliance activities provide the Bureau's main capability to control use and aid resource protection in many areas. The public is also well served through the permitting of commercial operators; otherwise, many people who lack the equipment or the "know how" to function in wild environments would truly be "locked-out" of many public land recreation opportunities.

Commercial recreation use and competitive events on the public lands also have important economic implications for communities and private industry. They generate significant economic returns for communities and regions, especially around major Western rivers and in the California Desert and southern Nevada.

Outfitters and guides alone contribute $50-60 million annually to the economy of Western States, with a major segment of this value being derived from recreational activities involving BLM-administered lands. Issuance of permits also provides a direct monetary return to the Federal government.

On the bulk of the public lands, the Bureau only needs to facilitate those extensive recreation uses such as hunting, fishing, rockhounding, four-wheeling, camping and other back-country activities by providing maps and information on the availability of these recreation opportunities and through the issuance of permits for commercial recreation and tourism operations.

The Bureau focuses most of its recreation management on about 5 percent of the public lands (150 individual sites) where more intensive recreational use requires Bureau involvement through direct supervision of use activities. This phase of the program includes management of 14 national wild and scenic rivers; 340 outstanding natural areas; 20 designated recreational, historic, and scenic trails; the White Mountains National Recreation Area (Alaska); the East Mojave National Scenic Area; and major portions of the California Desert and King Range (California), and Steese National Conservation Areas (Alaska). Other intensively used areas include whitewater rivers, developed camping and picnicking sites and designated ORV areas.

An important component of the program involves providing an on-the-ground management presence in the nationally significant recreation management areas. The base program provides for rangers (with delegated law enforcement powers) and visitor service specialists in the California Desert; rangers in other selected areas of California, Arizona, Nevada, Utah, Idaho, Oregon, and New Mexico; and seasonal visitor management specialists in other more intensively used recreation management areas. In the States cited above BLM rangers add visibility and augment local law enforcement authorities who cannot provide a full-time law enforcement presence or resource-trained personnel in these areas. The presence of BLM rangers trained in law enforcement and use supervision is needed in special areas to prevent unauthorized and illegal activities that threaten critical resource values, to combat trespass and enclosure problems, and to help provide user safety.

Resource protection is a component of the program that prevents degradation or damage to resources from recreation-oriented activities. A major share of BLM recreation resource protection projects involve off-road vehicle use and include the installation of barriers, fences, and interpretative or restrictive signs. In addition, resource protection includes mitigation of adverse impacts from nonrecreation activities through stipulations in leases and permits.

Where sites and activities are more significant on a local rather than a national basis, the Bureau continues its efforts to evaluate these functions and to seek shared management responsibility, transfer, or termination of its role in providing such facilities or services. The Bureau also continues actively to encourage voluntary contributions of services, money, material, labor and other expertise to aid its recreation management and maintenance efforts. In the past, many conservation organizations, conservation and recreation groups, and public service organizations have assisted the BLM through a variety of volunteer efforts and cooperative arrangements in sharing management responsibility. The volunteer program in the BLM has grown from 2,044 volunteers contributing 82 workyears and $995,000 of work value in 1982 to 4,771 volunteers contributing 180 workyears and $3,181,000 of work value in 1985. Approximately 30 percent of these volunteer benefits relate to the recreation resources management program.

In an effort to expand joint efforts of this nature, BLM has provided direction to field offices for recreation management efforts in the cooperative management agreement (CMA) program. This supplements existing cooperative efforts by encouraging specific written agreements outlining management, improvement, or project development in specific areas. Examples of use of CMA's and of volunteers in recreation resources management include the agreement with the National Speleological Society and the Cave Management Research Foundation to provide cave management assistance on a nationwide basis and the agreement between the Bureau and the Friends of Red Rock Canyon to provide assistance in managing the Red Rock Canyon Visitor Center and interpretative programs.

Included in the 1987 Estimate is $80,000 for the Bureau's contribution to the support of the President's Commission on Americans Outdoors.

Decrease from 1987 Base

(Dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	8,042	7,198	-844
(FTE-T)	(190)	(180)	(-10)

The proposed decrease of $844,000 is possible without significantly impairing the quality of the Bureau's recreation management program. Unit costs are expected to decrease in the area of permit management since both the applicants and the agency will be more familiar with the procedures requiring recreation use permits. There will be some reduction in permit monitoring. This will be possible because BLM will have better knowledge of the applicants who have previously held permits, and the permittees themselves will have a better understanding of the stipulations. Thus, BLM monitoring can be concentrated on reported violations on and monitoring new permittees.

In addition to a reduction in permit monitoring, other surveillance and patrol activities will be similarly reduced. These reductions can, in part, be accomplished because the BLM will be able to better define those areas and sites where frequent patrol is necessary as opposed to those where less frequent random or seasonal patrols are most effective.

There will be a small decrease in activity planning and in resource protection projects in areas considered to be the least critical. The reduction in plans completed is possible because, sufficient information is usually available, in the absence of a completed plan, to allow a manager to determine any appropriate interim protective measures needed. Interim protection is frequently used because unforeseen circumstances initiated outside the Bureau result in a need for prompt action.

The BLM will continue to emphasize the utilization of volunteers and the development of cooperative agreements to enhance the management of recreation resources on the public lands and to improve cost effective use of available resources.

The following is a comparison of workloads from 1985 through the 1987 Estimate level:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Inventory (000 acres)	8,038	3,559	3,559	3,559	---
Environmental impact statements (#)	1	5	3	1	-2
Activity plans (#)	105	78	94	83	-11
Permits issued (#)	6,600	6,326	6,676	6,676	---
Visitor services (8-hour patrol units)	6,776	7,212	9,319	7,719	-1,600
Resource protection projects (#)	213	230	278	268	-10

Distribution of change by object class

The object class detail for the decrease of $844,000 and 10 FTE is as follows:

	FTE	Amount
Personnel compensation	10	$273,000
Personnel benefits		44,000
Travel and transportation of persons		100,000
Transportation of things		20,000
Other services		357,000
Supplies and materials		50,000
Total		$844,000

Justification of Program and Performance

Activity:	Renewable Resources Management
Subactivity:	Fire Management

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	8,824	8,444	8,248	8,847	+599
(FTE-T)	(140)		(140)	(145)	(+5)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 BA Cancellation	1986 Adjusted Approp.
Fire Management	8,824	-380	8,444

As a result of P.L. 99-177, $380,000 of the cost of implementing the Initial Attack Management System (IAMS) Phase II will be deferred. More specifically, the procurement and installation of planned remote automated weather stations (RAWS) will be delayed; and the replacement of telecommunications subcomponent parts for the automatic lightning detection system (ALDS) will be decreased.

Authorization

43 U.S.C. 1746 P.L. 94-579	The Federal Land Policy and Management Act of 1976 provides for protection of public lands and resources from destruction by fire.
16 U.S.C. 594 P.L. 67-315	The Timber Protection Act of 1922 provides for mutual aid in fire protection.
42 U.S.C. 1856	The Reciprocal Fire Protection Agreement Act of 1955 provides authority for mutual aid in fire protection.

Objectives

The objectives of the fire management program are to:

- Establish, review, revise and implement the Bureau's Normal Fire Year Plan (NFYP) which contains program objectives and resource requirements for both the fire management and the firefighting and rehabilitation programs to conduct wildland fire protection and emergency presuppression actions by the Bureau, including the following:
  - Providing the optimum mix of trained personnel, logistical support, and communication systems to minimize the overall cost of wildfire in dollars, resource damages, and lives lost by reducing the number of fires that burn more than 10 acres from an annual average of 375 fires to 200 to stay within the 380,000 acre maximum average loss that can be sustained without disrupting resource utilization and management;

  - preventing an increase in the number and intensity of person-caused fires;
  - providing mutual assistance to other Federal and State agencies when wildland fires escape their initial control efforts;
  - training and deploying a total of 91 smokejumpers during the strength of force (SOF) emergency presuppression period in Alaska, California and the Great Basin in order to move firefighters to remote fires before the fires reach 10 acres in size; and
  - having approximately 350 fire engines and engine crews, 19 airtankers, 33 helicopters and helitack crews, and approximately 2,000 seasonal firefighters trained, equipped and deployed during the SOF period to initially attack the annual average of 2,960 fires that occur throughout Alaska and the Western United States.

- Cooperate with other fire agencies by developing coordinated and mutually-beneficial fire management systems;
- Detect potential lightning fire areas and disseminate information to over 50 field office locations to expedite fire suppression force deployment -- forces will be deployed so initial attack can be made within 30 minutes of the reported lightning fire;
- Develop a two-fold prevention program to reduce the number of person-caused fires and person-caused disaster fires on BLM-administered lands by 10 percent annually; and
- Provide technical guidance for the use of fire as a management tool to enhance or obtain resource management objectives.

Base program

The Base program level for 1987 in the fire management program is $8,248,000 and 140 FTE.

BLM's fire program is divided into two broad categories. The fire management subactivity provides program management, equipment, and information and is relatively consistent from year-to-year. The other category is "firefighting and rehabilitation" which covers the fire presuppression, firefighting, and rehabilitation expenditures that vary from year to year with the actual occurrence and severity of fires during the fire season. The firefighting and rehabilitation program is discussed under that subactivity elsewhere in the Justifications.

The fire management program shares the basic BLM purpose of protecting and enhancing the natural resources of the public lands to preserve their multiple-use capability to meet the Nation's resource requirements. Specifically, BLM is responsible for protecting property and natural resources on the 340 million acres of public lands managed by BLM from the destructive effects of wildfire, and for managing the fire use program ("prescribed burning") to ensure that resource objectives are met and that the fire is controlled and used safely.

BLM carries out its responsibilities on lands administered by BLM and on some lands of other Federal, State, and private agencies by providing direct suppression; by arranging cooperative protection exchanges with the Forest Service, Bureau of Indian Affairs, National Park Service, Fish and Wildlife Service, and some State agencies; and by entering into contracts with State and Federal agencies for protection of approximately 6 million acres of public land.

BLM also operates a large, inter-agency fire support center at Boise, Idaho, in cooperation with the Forest Service and other Interior agencies. This center, the Boise Interagency Fire Center (BIFC), provides logistic support by mobilizing and coordinating movement of fire suppression resources when local capability is exceeded and when the local agency requests assistance. Also housed at BIFC is the national fire radio cache and the BLM fire training development center.

During the mid-1960's and early 1970's, BLM pursued a course which emphasized the need for increased efficiency in combating the "disaster fire." The culmination of this effort was achieving full operation of the Boise Interagency Fire Center. By 1972, BLM had revised its priorities and had begun to increase its detection and initial attack capability. Full implementation of the Normal Fire Year Plan and the Initial Attack Management System (IAMS) is now projected for the late 1980's.

The priority accomplishments planned at the Base funding level are as follows:

o Fire forces will be trained, equipped and dispatched for planned suppression of the annual average of 2,960 fires;

o BLM will operate and maintain its share of the BIFC programs in fire preparedness, logistical support, training and communications;

o BLM will provide its pro-rated share of base program costs for the Alaska Fire Service (AFS);

o Phase II of the three-phase IAMS will be nearly implemented (see IAMS section below and impact of P.L 99-177 above); and

o Operation and maintenance for Phases I and II of the IAMS will be provided (see IAMS section below).

Alaska Fire Program (AFP)

The Alaska fire program base needs have remained at about $1,700,000 since 1979. In 1983, the Bureau's allocation to Alaska was reduced to $1,000,000 when the State of Alaska began to provide $700,000 through a cooperative protection agreement, and the Alaska fire program base level was maintained. Effective in 1986, State of Alaska funding will no longer be available in the base program.

By virtue of a Secretarial order, BLM provides fire protection to all Department of the Interior lands in Alaska and to applicable Native lands transferred under the Alaska Native Claims Settlement Act. This amounts to about 197 million acres of area to protect. As a result of the withdrawal of State of Alaska funding, funding to cover the base program will no longer be available at earlier levels which could severely reduce protection capability. Therefore, starting in 1987, the BLM will receive reimbursement of a portion of AFS base funding requirements from sister bureaus of the Department which benefit from the AFS program. The base program for the Alaska Fire Service is planned at $1,500,000 which includes the results of BLM organizational realignments/savings, yet maintains fire protection capabilities. Funding would be derived from the bureaus of the Department as follows:

Bureau of Land Management	$1,000,000
Fish and Wildlife Service	340,000
National Park Service	150,000
Bureau of Indian Affairs	10,000
Total Base, Alaska Fire Service	$1,500,000

Initial Attack Management System (IAMS)

The Bureau's base program provides funding for Phase II of IAMS ($800,000), which will only be partially completed and implemented in 1986. The $800,000 is being used to complete procurement, testing, and installation of 53 Level I Remote Automated Weather Stations (RAWS) in field locations and 35 million acres of fuels mapping.

The Phase I and Phase II development and implementation funding was used for acquisition of the system, to pay for initial data line transmission costs of the RAWS, and the central computer system. IAMS planning began in 1981; Phase I had been completed by 1984; and Phase II is planned for completion in 1986-1987. Until now, limited funding has been needed for operation and maintenance since the system was not operational.

Increase from 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	8,248	8,847	+599
(FTE-T)	(140)	(145)	(+5)

An increase of $599,000 and 5 FTE from the 1987 Base is needed to operate and maintain the IAMS in place, and would be used as follows:

- Routine testing, calibration, and operation of the IAMS hardware, automatic lightning detection system (ALDS) stations, RAWS, field located graphic terminals and the central computer;

- Routine replacement and maintenance of subcomponents on 28 ALDS, 106 Level I RAWS, 22 graphic terminals and the central computer system;

- Management and maintenance of system software and computing models; and

- Data transmission costs (telecommunications) for both land line and satellite communications for ALDS and RAWS data to the central computer and to field located graphic terminals.

Annual operation and maintenance costs for the complete IAMS are estimated to be approximately $1,341,000 after the complete system is in place.

Schedule of IAMS Costs

$000

	Actual		Estimated by Year		
	FY 1983	FY 1985	FY 1986	FY 1987	Outyears
Development & Implementation					
Phase I ($1,950)	1,950	---	---	---	---
Phase II ($2,200)	---	---	1,400	800	---
Phase III ($2,495)	---	---	---	---	2,495
Annualized Operation & Maintenance Costs	---	---	---	599	1,341
Annualized Suppression Cost Savings	---	540	540	2,000	5,000

Distribution of change by object class

The object class detail for the proposed increase of $599,000 and 5 FTE is as follows:

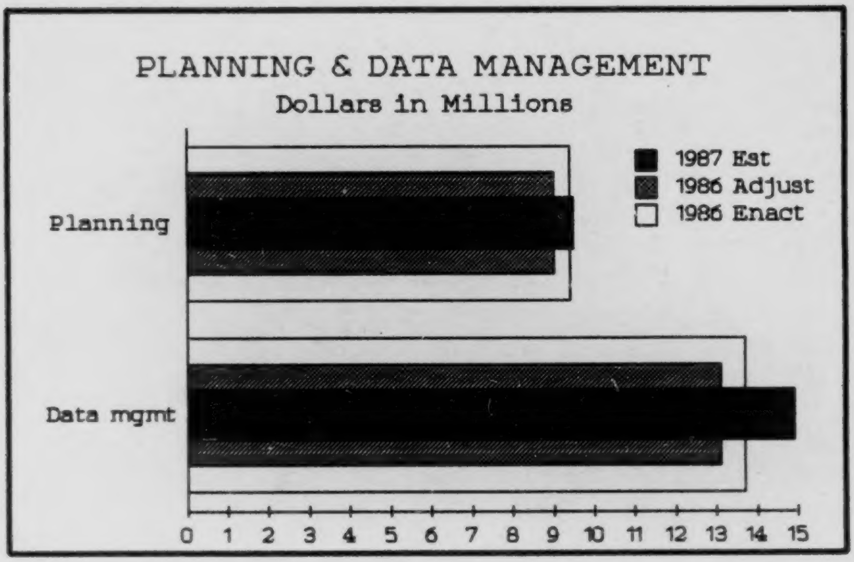
	FTE	Amount
Personnel compensation	5	$137,000
Personnel benefits		22,000
Travel and transportation of persons		10,000
Transportation of things		30,000
Communications, utilities, and miscellaneous charges		300,000
Other services		100,000
Total		$599,000

Activity Summary

Activity: Planning and Data Management

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
Planning	9,124	9,453	9,047	9,410	9,525	+115
Data Management	13,613	13,695	13,106	13,658	14,888	+1,230
Total	22,737	23,148	22,153	23,068	24,413	+1,345



Justification of Program and Performance

Activity: Planning and Data Management
Subactivity: Planning

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	9,453	9,047	9,410	9,525	+115
(FTE-T)	(215)		(215)	(217)	(+2)

Impact of Public Law 99-177

	1986 Enacted To Date	P.L. 99-177 B.A. Cancellation	1986 Adjusted Approp.
Planning	9,453	-406	9,047

The $406,000 decrease will postpone the start of initial development work (pre-planning) for 5 RMP's. Completion of 4 ongoing plans will be delayed with completion dates anticipated slipping as much as one year. Monitoring of the existing 103 plans would be limited to the most critical reviews necessary to meet legal requirements.

Authorization

43 U.S.C. 1711, 1712 P.L. 94-579	The Federal Land Policy and Management Act of 1976 requires planning for multiple-use management of the public lands.
42 U.S.C. 4321 et seq. P.L. 91-190	The National Environmental Policy Act of 1969 requires systematic, interdisciplinary planning to ensure the integrated use of the natural and social sciences and the environmental design arts in making decisions about major Federal actions that may have a significant effect on the environment.

Objectives

The BLM land-use planning program seeks to improve resource management decisions on the public lands through a rational process which promotes multiple use and sustained yield, and serves the needs of all public land users by:

- Improving BLM's ability to systematically identify and assess changing resource conditions and new public land uses;
- Enhancing the ability of line managers to resolve resource and land use issues affecting the public lands;

- Promoting coordination and consistency with the plans of other Federal agencies and State, local and tribal governments;
- Increasing public understanding of BLM's responsibilities and program activities, and facilitating public participation in public land management; and
- Facilitating compliance with statutory mandates including the Federal Land Policy and Management Act (FLPMA), the National Environmental Policy Act (NEPA), the Public Rangelands Improvement Act (PRIA), Federal Coal Leasing Amendments Act (FCLAA), and the Surface Mining Control and Reclamation Act (SMCRA).

Base program

The 1987 Base level for the planning subactivity is $9,410,000 and 215 FTE. This level provides for the preparation, approval and revision of resource management plans (RMP's), plan maintenance, monitoring and evaluation, and coordination of planning actions with other agencies, State and local government officials and the public.

Resource management planning activities are guided by the provisions of the BLM planning regulations at 43 CFR Part 1600 incorporating the land use planning requirements of FLPMA and other statutes. Specific analytical, public participation and planning related requirements are addressed in the planning regulations. This includes the Council on Environmental Quality regulations implementing NEPA. All RMP's and associated EIS's, amendments to existing plans, plan revisions, plan maintenance, monitoring and evaluation activities are accomplished in compliance with the planning regulations and the BLM Manual.

A mix of RMP's and management framework plans (MFP's) comprise the existing base of BLM plans. That base covers approximately 80 percent of the public land area. The MFP's in the base were prepared prior to adoption of the current planning regulations or during the transition period to RMP's. All MFP's presently in use were prepared in compliance with the principles of multiple use and sustained yield and were developed with public participation and intergovernmental coordination, but not necessarily precisely as prescribed by the current planning regulations.

RMP's in most cases are prepared for a BLM resource area (the Bureau's smallest administrative unit which includes an average of about 1.1 million acres of public land). RMP's and MFP's set forth an allocation of resources among competing uses and contain appropriate multiple use management prescriptions. BLM management activities, including a ranking of use authorizations and issuance of licenses and permits, must be implemented in conformance with the decisions and associated terms and conditions of existing plans.

Furthermore, BLM plans must be consistent with the resource-related plans, programs and policies of other Federal agencies, State and local governments and Indian tribes. The plans, therefore, serve as a key link in coordination with other agencies and governmental entities. Changes in circumstances, including the results of monitoring and evaluation, are addressed through the plan amendment process, or plan revision, if warranted.

New land use proposals, whether BLM or non-BLM in origin, which do not conform to existing plans, are considered through the plan amendment process and its attendant procedural and documentation requirements. New planning related data must be periodically and systematically incorporated into existing plans to maintain their usefulness.

Planning activities based on existing statutory and regulatory requirements fall within three general categories and include the inter-related actions described below:

- o Preplanning: (previously titled RMP Starts) Advanced preparation for plan making (appropriately scaled to the type of planning involved), including preliminary assessment of issues, data and skill needs (if any), schedule projection and initial assignments, and advance coordination (internal and external).
- o Plan Preparation: Execution of the 9 prescribed action steps as detailed in the 43 CFR 1600 regulations. These categories of steps are: scoping, inventory, situation analysis, formulating an assessment of alternatives, public review of draft plan and environmental document, plan selection, consistency review, protest resolution, and plan approval.
- o Plan monitoring and maintenance:
  - Determining the conformance of proposed actions to existing plan decisions and the need for amendment.
  - Monitoring and evaluating approved plans to determine plan effectiveness, progress and success of implementation and the need to schedule plan revisions.
  - Maintaining plans to ensure their continued utility and effectiveness.
  - Coordinating management actions and assuring consistency with other Federal agencies, and local, State and tribal governments.
  - Ensuring NEPA compliance of the subsequent and more detailed plans of actions that are taken as a result of the plans.

Until 1985, planning activity concentrated on the preparation of new RMP's to fulfill mandated program specific planning schedules (such as wilderness and grazing). Beginning in 1986, more emphasis was placed on plan monitoring, maintenance and amendment. This shift in the emphasis of the planning program from new RMP preparation to plan monitoring and maintenance reflects both progress on meeting the scheduled mandates and a growing appreciation of the importance of monitoring and maintenance activities to keep the existing BLM planning base current.

This shift is reflected in the workload measures shown in 1987, which capture the units related to plan monitoring and maintenance. These programs will increase to reflect the completion and use of the high priority, schedule mandated RMP's. BLM had thus expected more of a balance between new RMP starts and monitoring and maintenance needs. State Directors had estimated the number of preplanning efforts for 1986 at 14.

At the 1987 Base level, 14 preplanning efforts would be completed. Some of these would result in decisions to do plan amendments which are funded by the action-forcing benefiting activity, and some would result in a decision to do an RMP. Also, 20 ongoing RMP's will be completed, 103 plans will be monitored, and 170 plans will be maintained as described above. A significant effort will be expended in the areas of planning coordination (State and local, other Federal agencies, etc.) required by FLPMA and environmental coordination as required by NEPA.

Increase from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	9,410	9,525	+115
(FTE-T)	(215)	(217)	(+2)

The increase of $115,000 will be used to support increasing needs for intergovernmental coordination, especially with State and local governments, as well as expanded public participation and coordination in relationship to planning efforts.

Actual 1985 accomplishments and estimated accomplishments for 1986 and 1987 are as follows:

Workload Measure *	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Preplanning efforts (number completed)	14	14	14	14	---
Resource mgmt. plans (number completed)	21	15	20	20	---
Plans monitored (number)	100	103	103	103	---

*Units adjusted to make all years comparable using new Financial Management System.

Distribution of change by object class

The object class detail for the proposed increase is as follows:

	FTE	Amount
Personnel compensation	2	$ 55,000
Personnel benefits		9,000
Other services		51,000
Total		$115,000

Justification of Program and Performance

Activity: Planning and Data Management
Subactivity: Data Management

(Dollars in thousands)

	1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	13,695	13,106	13,658	14,888	+1,230
(FTE-T)	(220)		(220)	(235)	(+15)

Impact of Public Law 99-177

	1986 Enacted	P.L. 99-177 B.A. Cancellation	1986 Adjusted Approp.
Data Management	13,695	-589	13,106

A reduction of $100,000 in ALMRS will slow initial system development, but should not affect the final implementation schedule.

An estimated $152,000 will be saved by fewer equipment purchases and a slowdown in development activities for the Geographic Information System (GIS) applications in the BLM.

The reduction of $337,000 in the ADP program will result in $237,000 less money available for new equipment purchases and a reduction of $100,000 from monies planned for contracting costs.

Authorization

43 U.S.C. 1711, 1731 P.L. 94-579	The Federal Land Policy and Management Act of 1976 requires preparation and maintenance of an inventory of all public lands and their resources and other uses on a continuing basis and provides for management of the public lands through the BLM.
44 U.S.C. 3501-3520 P.L. 96-511	The Paperwork Reduction Act of 1980 provides for coordination of Federal information policy, and as part of this, ensures that automatic data processing and telecommunications technologies are acquired and used in a manner which improves service, delivery; and productivity, and reduces the information processing burden for the Federal Government and the general public.

Objectives

The objectives of data management are to:

- Improve the reliability, accuracy and utility of the Bureau's lands and minerals records system by continuing development of the Automated Land and Mineral Record System (ALMRS);

- o Continue the BLM ADP/Data Communications Equipment Modernization Project (ADEMP). (This study, which will be completed in 1987, will determine what equipment is needed to provide cost-effective and efficient data management support to Bureau programs during the 1980's and 1990's.);
- o Explore other methods for making data management operations more cost-efficient;
- o Provide appropriate ADP systems and programs to meet Bureau data management priorities;
- o Process data using established remote sensing techniques in support of BLM field operations requirements; and
- o Develop geographic information technology in support of BLM energy and renewable resource program requirements.

Base program

The 1987 Base funding level for the data management subactivity is $13,658,000 and 220 FTE. The program involves ADP systems development, computer operations, system and hardware maintenance, data telecommunications, and geographic information technology to support BLM natural resource programs and administrative systems requirements.

Automated Data Processing (ADP)

Automated data processing plays a major role in the accomplishment of BLM's responsibilities as manager of the public lands. This role includes processing of data necessary to make decisions involving resources valued in multi-billions of dollars as well as providing support to make administrative and management activities more efficient.

At present there are about 20 major operating automated systems within BLM that provide managers with information to make sound resource management decisions. Examples of such systems are the Automated Coal Lease Data System (ACLDS), Lease Management System (LMS), and the Oil and Gas Lease Inventory and Inspection System (OGLIIS). These systems ensure proper lease management involving compliance and collections of revenues from solid and fluid mineral leases. Other examples include the Range Management Automated System (RMAS) which provides accounting for grazing fee billings and provides information on range utilization, and the Ecological Site Inventory which provides managers with necessary information regarding soil and vegetation data including ground cover, erosion ratings, ecological condition and trend. Other automated systems provide necessary information regarding personnel, budget, finance, and other administrative functions.

Under ADP, the following functions are performed:

1. Operation and maintenance of ADP equipment;
2. Development, testing, and implementation of new ADP systems;
3. Acquisition and installation of appropriate kinds and sizes of ADP equipment equipment in Bureau field offices, and operation and maintenance of central site hardware configurations and State office minicomputers;

4. Screening and control of new system proposals to ensure that proposals support Bureau missions as specified by on-the-ground users and managers and that proposals are coordinated to result in uniform Bureauwide applications; and

5. Technical assistance to system users.

In developing new systems or improving old ones, BLM employs a carefully structured and controlled process to define user requirements, guide systems design and development, and implement, operate and maintain automated systems. During the definition of user requirements, decisions are made concerning the application of ADP versus other forms of information management, e.g., manual record systems, microfiche, etc. Because data management is still a rapidly expanding technological field, there is considerable management work done on developing policies, plans, standards, procedures, and guidance to the field offices. Part of this management is in support of Departmental efforts to develop coordinated ADP applications.

The initial BLM ADP systems concept was based on having a large, centralized computer center at BLM's Denver Service Center (DSC) to serve all of the Bureau's needs. A Honeywell 66/80 mainframe computer was acquired in 1978 and upgraded to a DPS-8 in 1982-1983. Most administrative and natural resource ADP systems are run on this equipment. However, as the state-of-the-art in ADP technology and systems has advanced, Bureau emphasis has changed to enhancing BLM State Office on-site data processing capability. Each BLM State Office now has an on-site minicomputer system for general ADP work, and 9 State Offices also have another minicomputer for geographic information technology (graphical) work. To provide these on-site ADP services, each State Office has a small ADP staff to operate the equipment, develop ADP system applications to meet local needs, and provide technical assistance and support to the district and area office resource personnel. Work is continuing to transfer selected ADP systems from the DSC mainframe to the State Office minicomputers to improve support for local operations and provide faster and more reliable service for all local users. Most recently, technological improvement and increased availability of low cost microcomputers has given field offices the capability to acquire expanded and tailored automated support for local program operations and needs.

Geographic Information Technology

Geographic information technology offers another way in which automation helps resource managers to make better-informed decisions and reduce costs. Demonstrated benefits of automated over manual methods in savings of time and money and in increasing accuracy and reproducibility of data manipulation have greatly expanded the field demand for automated geographic information management.

This technology replaces manual comparisons of any information which can be displayed on a map or mylar overlay, such as terrain, land ownership, transportation networks, land use, and water sources. Geographic information technology is presently evaluated and assessed at BLM's Denver Service Center (DSC), which develops the appropriate software and procedures to enable State Offices to manipulate information to address specific natural resource management issues for environmental impact statements (EIS's), resource management plans (RMP's), and other planning decisions. The DSC also creates data bases which incorporate information acquired from remote sensing by satellite and other means. Routine applications include: 1) classifying ground cover for habitat location, rangeland and wildlife habitat improvement, and woodland management; 2) defining range inventory sites by soil type, landform, and vegetation similarities; 3) monitoring soil and vegetation changes to detect unauthorized surface disturbance on BLM land, recovery from catastrophic events such as flood, fire, or drought, and land use effects for reseeding or grazing uses; and 4) developing fuel models to predict fire potential for use with remote automatic weather station data and automatic lightning detection. Remotely sensed data are generally applied along with other information in a geographic information system.

Automated Land and Mineral Record System (ALMRS)

The proposed funding level for ALMRS within Data Management in 1987 is $2,004,000, the same as 1986. The ALMRS effort was initiated in 1983 to develop and implement automated procedures for realty and minerals case management, land descriptions, land and minerals ownership/use authorization status, and geographic coordinate data covering all land and minerals ownerships where BLM has a surface and/or subsurface management interest. The system will allow for logical progression from the existing manual records system to a fully automated system. This will eventually enable BLM to retire its existing hard-copy records which consist of the historical index, master title plat (MTP) and land use plat which are currently the foundation of the Bureau's lands, minerals, and renewable resources program activities. When fully implemented, ALMRS will contain data for approximately 46,000 townships.

Initial efforts in the ALMRS program have been devoted to automating lands and minerals casework and designing an automated system that will integrate data bases for legal land description and status data, including mining claims. By June 1, 1985, approximately 270,000 cases had been entered into a case recordation data base that is capable of providing automated serial register pages, limited statistical reports, case counts, individual case tracking, and case abstracts. By focusing on the case recordation data base, we have been able to eliminate backlogs in land and mineral case work.

During 1985, BLM contracted with the Federal Computer Performance Evaluation and Simulation Center (FEDSIM) to assess alternative system architectures (hardware, software, telecommunications, data base locations, etc.). The Feasibility Study was completed in December 1985, and a preliminary report is presently being reviewed by agencies potentially affected by ALMRS. A copy of the final feasibility study document will be sent to Congress after it is completed. The study, in conjunction with prototype system testing, will enable the Bureau to develop an accurate estimate of the long-term project schedule and system costs. After the systems requirements are fully defined, systems design work will proceed. The systems design stage will define how data bases for legal land description, current status, and geographic reference will be linked with the existing case data and mining claims data bases.

A prototype system will be tested in the two BLM pilot State Offices of Arizona and New Mexico during 1987. In 1988 or early 1989, actual implementation of a fully operational ALMRS will occur in Arizona and New Mexico, including automated case tracking, report generation (statistical and title reports among others), and some graphic display capability to replace the present hard-copy plats for providing land status. We anticipate that implementation and operation of ALMRS in the remaining State Offices will begin in 1989. System implementation will proceed as each State completes data collection and entry and as ADP equipment is purchased for use with the system.

Increase from 1987 Base

(Dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	13,658	14,888	+1,230
(FTE-T)	(220)	(235)	(+15)

The proposed increase of $1,230,000 and 15 FTE's will provide increased ADP technical support to field users ($460,000), purchase additional equipment in support of the geographic information technology ($435,000), and fund additional costs of equipment maintenance ($335,000).

The proposed increases for additional technical support to field ADP users and equipment maintenance costs respond to the increasing use of ADP equipment and applications within BLM. The additional technical support will ensure that on-the-ground users can obtain the best use of all available ADP capability. This means that BLM's investment in its ADP equipment will be more efficiently utilized. Technical support involves not only assistance to users on how to use ADP facilities and applications, but also provides standards and controls needed to prevent inefficient or uneconomical use of ADP technology and to ensure that there is equipment and system compatibility and linking. Increased equipment maintenance costs are incurred to ensure that equipment is operational when needed and that equipment does not fail with the resulting potential for loss of critical data, and to preserve the value of BLM's investment in its computer facilities.

The $435,000 increase to purchase additional equipment for geographic information technology will help to meet the increasing demands for the use of the technology in the evaluation of resource conditions and the impact of alternative planning assumptions on resource management requirements. The new equipment will consist of a specialized minicomputer, plotter, and associated peripheral equipment to provide geographic information technology in an additional State Office for a total of seven states so equipped. The first priority in geographic information technology applications is analysis of mineral resource data to improve BLM's management of these resources.

(dollars in thousands)

Program Component	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-)
ADP Development	2,350	2,330	2,330	---
ADP Operation and Maintenance	8,604	8,586	9,406	+820
Data Telecommunications	1,480	1,480	1,480	---
Geographic Information Technology	1,261	1,262	1,672	+410
TOTAL ($)	13,695	13,658	14,888	+1,230
ALMRS Program ($)	1,994	2,006	2,006	---
Other Data Management ($)	11,701	11,652	12,882	+1,230

Distribution of change by object class

The object class detail for the proposed increase of $1,230,000 and 15 FTE is as follows:

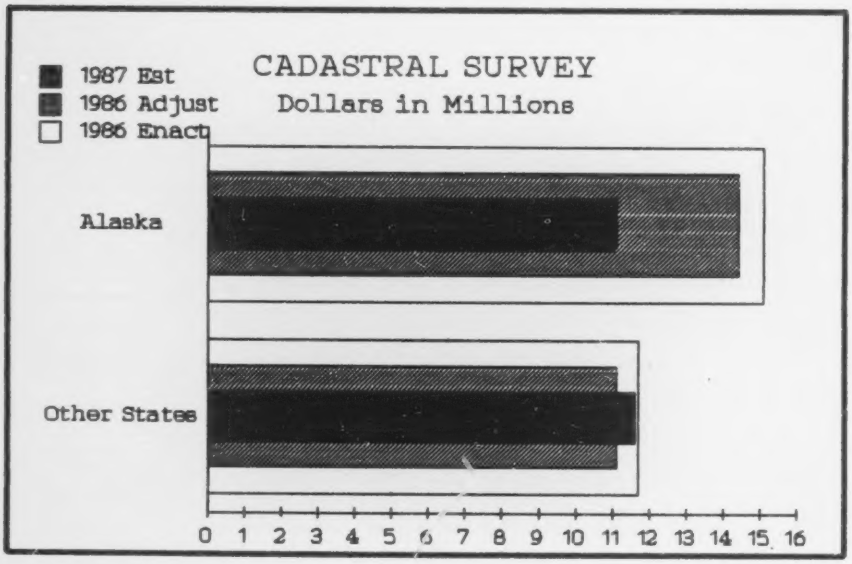
	FTE	Amount
Personnel compensation	15	$ 411,000
Personnel benefits		65,000
Travel and transportation of persons		30,000
Transportation of things		22,000
Communications, utilities, and miscellaneous charges		23,000
Other services		302,000
Equipment		377,000
TOTAL		$1,230,000

Activity Summary

Activity: Cadastral Survey

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc(+) Dec.(-) from Base
Alaska	13,780	15,083	14,434	15,059	11,069	-3,990
Other States	10,896	11,673	11,171	11,622	11,622	---
Total	24,676	26,756	25,605	26,681	22,691	-3,990



Justification of Program and Performance

Activity: Cadastral Survey

(Dollars in thousands)

Program Elements		1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Alaska	$	15,083	14,434	15,059	11,069	-3,990
	(FTE-T)	(140)		(140)	(131)	(-9)
Other States	$	11,673	11,171	11,622	11,622	---
	(FTE-T)	(290)		(290)	(290)	(---)
Total Requirements	$	26,756	25,605	26,681	22,691	-3,990
	(FTE-T)	(430)		(430)	(421)	(-9)

Impact of Public Law 99-177

	1986 Enacted to Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Cadastral Survey	26,756	-1,151	25,605

As a result of the $1,151,000 P.L. 99-177 budget authority cancellation, Alaska cadastral survey will defer planned survey contracts of $649,000. This will reduce planned miles of survey by 270. The Other States cadastral survey will be reduced $502,000 in the areas of travel, transportation and equipment purchases. Miles surveyed will be reduced by 500.

Authorization

43 U.S.C. 1711, 1738 P.L. 94-579	The Federal Land Policy and Management Act (FLPMA) of 1976 authorizes the delineation of boundaries of the public lands.
43 U.S.C. 1612 P.L. 92-203	The Alaska Native Claims Settlement Act (ANSCA) of 1971 requires the survey of Alaska Native lands for conveyance to Native associations and individuals.
48 U.S.C. 2 P.L. 85-508	The Alaska Statehood Act, as amended, requires the survey of lands for State selection.
16 U.S.C. 3101, et seq P.L. 96-487	The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 requires maps and legal descriptions.
45 U.S.C. 1201 P.L. 97-468	The Alaska Railroad Transfer Act of 1982 requires surveys to be completed in five years.

The Secretary of the Interior has sole authority to execute all legal boundary surveys involving Federal public domain lands. Immutable boundaries of the public lands must be delineated on the ground and in the official records, as determined by a cadastral survey, prior to land conveyances and many types of resource development. In support of the Bureau's priority programs, cadastral survey will:

- o Complete original surveys as a prerequisite to actual conveyance of public land (e.g., Alaska Native allotments and State selections);

- o Establish precise, on-the-ground boundaries for leases or other uses of the public lands (e.g., in Wyoming, the restoration of old, original surveys on mineral lease lands that will affect millions of dollars of resources); and

- o Determine precise boundaries to avoid (a) trespass by private parties against the government or by the government against private owners, or (b) underutilization of resources (such as timber) for fear of trespass when boundaries are uncertain.

The Bureau executes 90 percent of the actual field surveys with its own personnel, while 10 percent are accomplished by contract or by other government agencies under delegation from BLM. BLM is responsible for all of the official survey records (plats and field notes). There is a current agreement with the National Park Service (NPS) and the Forest Service (FS) under which those agencies conduct cadastral field surveys on their lands; these surveys must, however, be approved by BLM. The BLM/FS agreement allows an increase in the number of legal cadastral surveys on FS-administered lands. This benefits administration of all programs by helping resolve trespass and unauthorized occupancy cases and promoting maximum utilization of the natural resources. BLM provides presurvey search of title records and previous surveys to determine the survey method to be used and is responsible for all records management following survey approval. Surveys required by other agencies, such as the BIA, are presently conducted by BLM on a reimbursable basis.

All cadastral surveys are initiated to solve specific problems. That is, even though BLM has been directed to complete original surveys and is responsible for resurvey, the Bureau initiates these types of survey only when needed to solve a specific management problem.

Three major types of cadastral surveys are executed on the public lands:

- o Original surveys under the Public Land Survey System (PLSS) were established by Congress in the Ordinance of 1785. The Secretary of the Interior has delegated to BLM the authority for the original survey of the public lands as well as the authority to execute resurveys when needed to determine the boundaries of the public land for management purposes. Since the resurveys are higher priority than original surveys, completion of the original surveys has been delayed except for those required for Alaska land conveyances and those few in the other States required for trespass abatement and resource management.

- Resurveys are executed to re-establish the boundaries executed in the original survey or to restore corner monuments that have been lost or have deteriorated since the original survey. These resurveys are required to identify the land boundaries for land conveyances, timber sales, trespass determination, minerals, geothermal, and other resource development. Approximately 10 percent of resurveys are completed at the request of other Federal agencies.

- Special surveys are those that do not fall into either of the above two categories. These include surveys of public lands and islands omitted from original surveys, correction of fraudulent land surveys, mineral surveys of lode mining claims, and many special surveys in Alaska, such as townsites, trade and manufacturing sites, Native allotments, and homesites.

The BLM cadastral survey program is divided into two program elements -- Alaska and the Other States -- which have substantially different work requirements and support needs.

ALASKA

Objectives

All planned surveys in support of Alaska programs are required by recent acts of Congress or existing land laws. The Alaska cadastral survey objectives are to:

- Support the land designation and conveyance provisions of the Alaska Statehood Act, ANCSA, ANILCA, and the Alaska Railroad Transfer Act; and

- Survey remaining Native allotment parcels, other small tracts and water body meanders within lands to be conveyed or transferred under ANILCA, ANCSA and the Alaska Statehood Act.

Base program

Funding for the Alaska program at the Base level is $15,059,000 and 140 FTE. In 1987 the program will continue an intensive, concentrated effort to survey small inholdings and water body meanders within selected lands. These surveys are very high-cost, low-acreage surveys but are essential for patent issuance and have been deferred in previous years. Many of the areas remaining to be surveyed are located in areas of the State where terrain, climatic conditions and required logistical support will cause a large increase in the cost per acre of the areas to be surveyed. The net effect of these two factors is a considerable reduction in the number of acres surveyed for ANCSA and State selections. This does not reflect a change in the magnitude of the Alaska program workload but, instead, represents the effects of tackling a more complex, higher cost survey workload.

Decrease from 1987 Base

(Dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	15,059	11,069	-3,990
(FTE-T)	(140)	(131)	(-9)

The $11,069,000 requested for 1987 represents planned accomplishment of 3,085 miles of completed rectangular net survey (approved plats) and 515 miles of completed special surveys (approved plats, small tracts and Native allotments). These completed surveys will make 3.3 million acres available for patent to the State of Alaska and Native corporations. Special surveys (small tracts) will make 375 parcels available for patent to private individuals.

The planned workload for 1987 compared with 1985 and 1986 is as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Original Survey (miles)	4,585	4,480	4,480	3,085	-1,395
Special Survey (miles)	708	800	800	515	-285

A change in program emphasis has shifted the Bureau's workload effort from surveys for ANSCA conveyances back to surveys for State selections and surveys of Native allotments. BLM is developing an approach to managing survey work which identifies the various survey needs of a particular area, especially all of the small tracts such as allotment parcels and inholdings which require survey, and combining these surveys into a coordinated project "window," especially for field work, to reduce the costs of performing individual small area surveys.

Distribution of change by object class

The object class detail for the decrease of $3,990,000 and 9 FTE is as follows:

	FTE	Amount
Personnel compensation	9	$246,000
Personnel benefits		39,000
Travel and transportation of persons		50,000
Transportation of things		130,000
Other services		3,500,000
Supplies and materials		25,000
Total		$3,990,000

OTHER STATES

Objective

The objective of the Other States cadastral survey program is to provide cadastral survey support outside of Alaska for Bureau priorities within the lands and realty, energy and minerals, forestry, and other renewable resources programs.

FY 1987 program

The 1987 Estimate for the cadastral survey Other States program is $11,622,000 and 290 FTE. At this level of funding, the Bureau will be able to complete 100 miles of original surveys and 6,910 miles of resurveys and special surveys in direct support of program activities as follows:

- Original survey amounting to 100 miles will be completed to provide descriptions of lands proposed for disposal and to respond to public requests for survey of omitted land.

- Some 2,626 miles of resurvey will be completed for lands programs to obtain legal property descriptions for the Unintentional Trespass Act, for proposed exchanges, and for efforts to solve some of the unauthorized occupancy situations which exist throughout the West and in some Eastern States;

- Energy development programs in areas of extensive intermingled lands will require 2,971 miles of resurvey. Surveys will permit land ownership identification and, ultimately, will expedite energy development exploration.

  In 1987, emphasis will be on resurveys in the Powder River Basin of Wyoming. Survey corners in this area of high energy mineral interest have been obliterated, and dependent resurveys recently completed have shown that many townships have heavy distortion or extra acreage. This presents an oil and gas resource management problem for both industry and the Federal Government. The 1987 program provides for resurvey of thirteen townships.

- Resurvey for forestry operations to support planned timber sales amounting to 829 miles; and

- Some 484 miles for multiple-use resource and other program needs to delineate legal property boundaries in support of planned management actions such as trespass abatement, grazing access, and recreation.

The proposed workload accomplishments for the Other States cadastral survey program are as follows:

Workload Measure	1985 Actual	1986 Estimate	1987 Estimate
Original survey (miles)	55	100	80
Resurvey (miles)	5,201	6,675	6,090
Special survey (miles)	288	235	200

Activity Summary

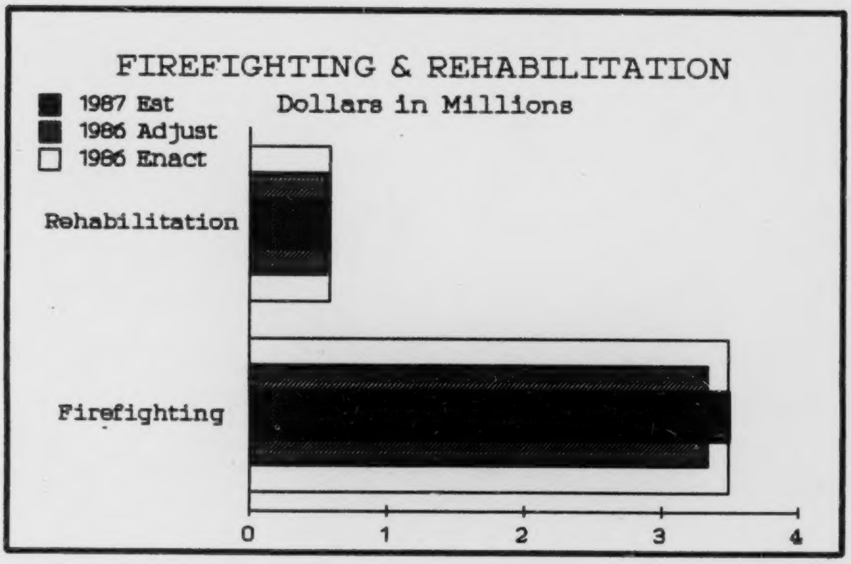
Activity: Firefighting and Rehabilitation

(Dollars in thousands)

Subactivity	FY 1985 Actual 1/	FY 1986 Approp. Enacted 2/	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Firefighting and Presuppression	70,010	3,492	3,342	3,492	3,492	---
Rehabilitation	4,091	584	559	584	584	---
Total	74,101	4,076	3,901	4,076	4,076	---

1/ Excludes $45 million appropriation in the 1985 supplemental which was transferred to other accounts for repayment of 1984 firefighting costs.

2/ Estimated additional 1986 "Firefighting and Rehabilitation" costs of $48 to $50 million will be financed through transfers authorized under section 102 of the General Provisions of the Interior Appropriations Act.



Justification of Program and Performance

Activity: Firefighting and Rehabilitation

(Dollar amounts in thousands)

Subactivity		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
Firefighting and Presuppression	$	3,492	3,342	3,492	3,492	---
	(FTE-T)	(848)		(848)	(848)	(---)
Rehabilitation	$	584	559	584	584	---
	(FTE-T)	(20)		(20)	(20)	(---)
Total Requirements	$	4,076 1/	3,901	4,076	4,076 2/	---
	(FTE-T)	(868)		(868)	(868)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 Reduction	1986 Adjusted Approp.
Firefighting & Rehabilitation	4,076	-175	3,901

As a result of the $175,000 P.L. 99-177 reduction, the purchase of firefighting supplies and equipment will be deferred and reductions will be made in other expenses for fire season preparation.

Authorization

P.L. 98-473, Sec. 102; P.L. 99-190 Sec. 102	The General Provisions of the FY 1985 and FY 1986 Appropriations Acts for the Department of the Interior and Related Agencies authorize the Secretary to transfer funds from other Department accounts for the suppression or emergency prevention of forest or range fires on or threatening the public lands and for the emergency rehabilitation of burned lands.

1/ Actual firefighting and rehabilitation expenditures depend on the actual occurrence and severity of fires or other natural disasters and vary from year to year. In 1986 emergency presuppression, firefighting and rehabilitation costs will be financed through current year transfers made under section 102 of the General Provisions.

2/ The amount requested for 1987 is only the minimum amount needed to initiate emergency actions. Estimated FTE are accounted for here to reach Bureauwide totals although funding for most of these FTE's is provided through current year fund transfers.

Objectives

- o Provide the forces necessary to detect, attack, and suppress wildfires in order to maintain the productivity of the public lands;
- o Provide the initial funding for immediate actions to reduce the damage resulting from wildfires or other natural disasters; and
- o Provide emergency rehabilitation of burned-over lands to prevent further damage and protect resource values for future productivity.

FIREFIGHTING AND PRESUPPRESSION

The firefighting and presuppression program includes the following components:

A. Management: This category includes the required permanent workforce necessary to initiate and manage the fire preparedness and suppression program and includes the planning, evaluation, and management necessary to carry out the suppression effort. Only permanent personnel assigned specifically to management of the fire suppression program are funded in this category.

B. Presuppression: These functions are performed to prepare the fire suppression forces to fight an average of 2,960 fires annually. Included are: hiring and training approximately 2,000 seasonal fire suppression personnel; inspecting and servicing 350 fire trucks; making available (through contract) 33 helicopters, 19 retardant aircraft, and 30 multi-purpose aircraft; inventorying and stocking fire supply caches; activating 120 field fire stations; activating weather stations and automatic lightning detection facilities and lookouts; initiating operation of large coordination and logistic support facilities; and providing communication networks and facilities. These activities take place during the designated activation periods of the fire season. The Bureau uses full service contracts through the Office of Aircraft Services to meet all aircraft support requirements of this mission.

C. Suppression: These functions include all actions directly tied to suppressing a specific fire including costs of: firefighting and fire command/support personnel; suppression aircraft operations; housing, feeding, and logistical services for all employees assigned to the fire; firefighting equipment, supplies, materials and tools; refurbishing or replacing equipment used, damaged or lost in the fire suppression effort; and the associated costs of logistic support. Costs begin when the first fire report is received and end when the equipment is returned to a state of readiness. Regular and overtime pay of both permanent and temporary employees is charged to this program category.

REHABILITATION

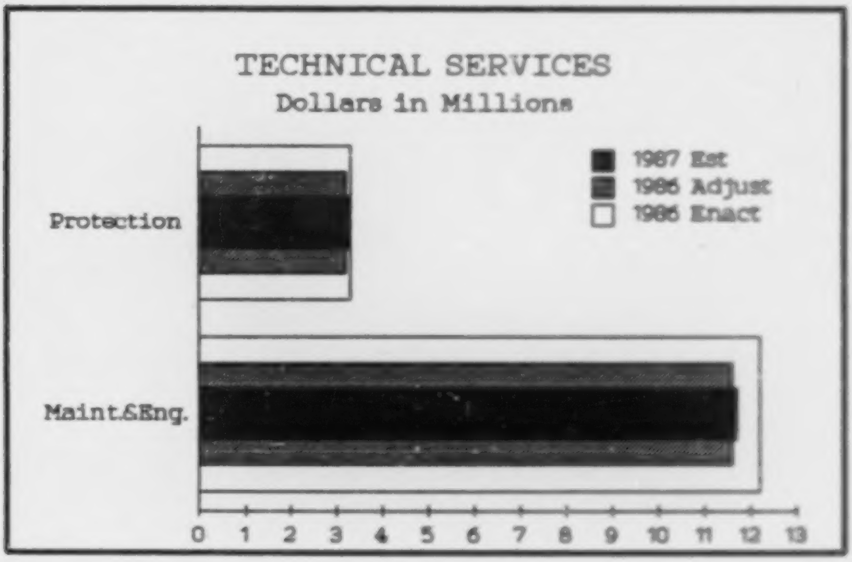
Rehabilitation costs are incurred to prevent land degradation, resource losses, and other dangerous situations due to damage by fire. This subactivity provides funds for specific emergency rehabilitation projects and includes such costs as reseeding a burned area to quickly establish a vegetative cover to reduce wind and water erosion damage; construction of temporary water diversion structures to reduce erosion from water runoff; temporary fencing to prevent animals from killing the revegetated areas; and felling of fire-damaged trees in high use recreational areas.

Activity Summary

Activity: Technical Services

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Resource Protection	2,351	3,320	3,177	3,320	3,320	---
Maintenance and Engineering Services	11,851	12,160	11,637	12,145	11,745	-400
Total	14,202	15,480	14,814	15,465	15,065	-400



Justification of Program and Performance

Activity: Technical Services
Subactivity: Resource Protection

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) from Base
$	3,320	3,177	3,320	3,320	---
(FTE-P)	(33)		(33)	(33)	---

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 G-R Cancellation	1986 Adjusted Approp.
Resource Protection	3,320	-143	3,177

As a result of the $143,000 P.L. 99-177 reduction, filling of vacancies will be delayed, and travel and transportation expenses will be deferred. These reductions will result in fewer personal contacts between BLM personnel and State and local government law enforcement personnel. This reduction will not reduce the number of law enforcement agreements, but it will impact the dollar value of most agreements.

Authorization

43 U.S.C. 1733 P.L. 94-579	The Federal Land Policy and Management Act (FLPMA) of 1976, Section 303(a), authorizes regulations to carry out the provisions of the Act with respect to the management, use, and protection of public lands, including the property located on these lands. Under the Act, the Secretary may authorize Federal personnel or contract with appropriate local officials to assist in carrying out his law enforcement responsibilities.

Objectives

- Ensure compliance with all Federal laws and regulations and appropriate State and local laws governing the protection of the public lands and resources as directed by FLPMA; and

- Protect the natural resources from unlawful activities and investigate incidents of unlawful acts against public land resources through an effective law enforcement program.

FY 1987 program

The 1987 Estimate for the resource protection subactivity is $3,320,000 and 33 FTE.

Section 303 of FLPMA encouraged BLM to enter into contracts and law enforcement agreements with State and local law enforcement agencies to assist in the enforcement and regulation of use and occupancy of the public lands. Since 1978, law enforcement agreements have been signed with local law enforcement agencies in most of the Western States. For the most part, thede agreements emphasize the enforcement of State and local ordinances rather than Federal laws on public lands. Enforcement of Federal laws on public lands rests with Federal law enforcement officials.

The actual number of law enforcement agreements can vary from year to year because agreements may be on a county-wide basis, for specific problem areas, or for a specified, limited time period (such as long holiday weekends). An estimated 83 agreements will be in effect in 1987.

The estimated distribution of agreements by State follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
Law enforcement agreements signed - Total	51	83	83
Alaska	--	2	2
Arizona	3	8	8
California	10	20	20
Colorado	--	5	5
Idaho	10	12	12
Montana	1	2	2
Nevada	2	5	5
New Mexico	--	2	2
Oregon	21	21	21
Utah	4	6	6

BLM special agents monitor each cooperative agreement. The agreements are usually with a county sheriff or a State or local law enforcement agency. Resources being protected through law enforcement agreements vary from State-to-State and by the nature of the problem.

Cooperative agreements in California's Mendocino County and in Montana's Fort Meade Recreational Area and with Nevada's Division of State Parks all provide for vehicular patrol, radio monitoring and a law enforcement presence at selected high-use public land use areas which act as deterrents to numerous types of violations. Patrol and presence, particularly in remote and isolated areas, provide a measure of prevention, reducing people-versus-people violations, vandalism to improved facilities, ORV violations, and vegetative thefts to a vast area of public lands which otherwise would remain unprotected.

Direct BLM Protection Activities

Case investigation continues to be the mainstay of BLM law enforcement work. It provides investigative contacts which give exposure and visibility to resource protection personnel and, in many cases, acts as a deterrent to further violations.

From 2 to 4 special agents are assigned to each BLM State Office and the Headquarters Office to conduct criminal investigations and manage the BLM law enforcement program.

Investigations conducted by BLM special agents have resulted in Federal convictions for theft of coal; oil and gas lottery fraud; theft and destruction of archaeological resources, timber, Native desert vegetation, minerals, and wild horses and burros; and unauthorized use.

The growing and harvesting of marijuana on public land continues to be a problem. Federal, State, and local law enforcement agencies are addressing this problem through individual and cooperative investigative and eradication efforts. BLM expects to devote $1,000,000 to marijuana control in 1987.

A number of law enforcement agreements signed with county sheriffs have singled out marijuana control as the major work task to be accomplished. BLM works cooperatively with State and local government agencies in this matter and is cooperating extensively with the Drug Enforcement Administration, Forest Service, National Park Service, and the Bureau of Indian Affairs in such projects as remote sensing and area reduction mapping, and the Campaign Against Marijuana Planting (CAMP) for this purpose. BLM special agents have devoted considerable time to marijuana control work, particularly in California and Oregon.

In the area of theft of cultural resources, the Bureau continues to cooperate with State and local law enforcement agencies through law enforcement agreements and on-the-ground presence. The Bureau utilizes law enforcement techniques such as aerial overflights, information from confidential sources, undercover operations and remote sensing devices to complement normal investigative procedures.

Examples of activities in the area of cultural and antiquities thefts include:

- o Alaska - the recovery of $108,000 of Mastodon Ivory;
- o Utah - widespread problems of archaeological artifact digging and trafficking has resulted in BLM's shifting the major part of its law enforcement capability in this area to a large-scale investigation of these problems;
- o Wyoming - investigation of a case of vandalizing and theft from an Indian burial site has resulted in the recovery of some items and appears to have helped decrease the number of complaints/cases of this nature.

The following table summarizes projected casework in 1985, 1986, and 1987:

Workload Measure	1985 Actual	1986 Estimate	1987 Estimate
Investigations:			
Wild horse and burro abuse	59	65	65
Timber theft	96	110	110
Range arson	23	30	30
Antiquities theft and destruction	68	95	95
Mineral theft and fraud	105	120	120
Theft and destruction of government property	62	75	75
Recreation site violations	89	110	110
Occupancy trespass	101	115	115
Marijuana control	143	165	165
*Other	97	105	105

* Assault, fraud, vegetative theft, assisting other agencies, and miscellaneous.

Justification of Program and Performance

Activity: Technical Services
Subactivity: Maintenance and Engineering Services

(Dollar amounts in thousands)

		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Building Maintenance	$	3,421	3,274	3,421	3,421	---
	(FTE-T)	(55)		(55)	(55)	(---)
(Energy Conservation Retrofit Projects)	$	(---)	(14)	(14)	(12)	(-2)
	(FTE-T)	(---)		(---)	(---)	(---)
Recreation Maintenance	$	4,096	3,920	4,081	3,681	-400
	(FTE-T)	(68)		(68)	(65)	(-3)
Transportation Maintenance	$	3,483	3,333	3,483	3,483	---
	(FTE-T)	(50)		(50)	(50)	(---)
Engineering Services	$	1,160	1,110	1,160	1,160	---
	(FTE-T)	(26)		(26)	(26)	(---)
(Energy Conservation-Technical Surveys)	$	(80)	(80)	(80)	(80)	(---)
	(FTE-T)	(2)		(2)	(2)	(---)
Total Requirements	$	12,160	11,637	12,145	11,745	-400
	(FTE-T)	(199)		(199)	(196)	(-3)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 Reduction	1986 Adjusted Approp.
Maintenance and Engineering Services	12,160	-523	11,637

As a result of the $523,000 P.L. 99-177 reduction, the filling of critical vacancies will be delayed, and some positions will not be filled. Contracts for maintenance services will be deferred. These reductions will not prevent critical maintenance, but will delay scheduled maintenance.

Authorization

43 U.S.C. 1701, 1731-32, 1762 — Federal Land Policy and Management Act of 1976 provides authority for:

- maintenance of roads required for protection, development, and management of lands for utilization of forest and other resources; and

- management of the public lands to protect scenic, historical, and archaeological values and to provide for outdoor recreation and human occupancy and use.

16 U.S.C. 594
P.L. 67-315 The Timber Protection Act of 1972 provides for the protection of timber owned by the United States from fire, disease, and insect ravages.

During the period of 1973-1986, the Bureau will have spent about $80 million in capital investments for buildings, recreation facilities, and roads. In total, the estimated in-place value of the capital facilities and buildings owned and constructed by BLM is almost $360 million. The proposed maintenance and engineering services expenditures of $11,745,000 in 1987 represent 3.3 percent of the capital investment to be used for maintenance, upkeep, and protection of the investment.

Maintenance expenditures are also directly related to ensuring a safe environment for users of public lands and for Federal employees who manage and protect resource values.

BUILDING MAINTENANCE

Objectives

- o Provide maintenance on 132 BLM-owned office buildings, 700 other BLM-owned buildings and associated water and sewer systems in order to:
  - provide a safe and professional working environment for BLM employees and for public visitors to BLM office buildings; and
  - maintain the public investment through adequate stewardship of Federal buildings.
- o Provide retrofit maintenance such as adding insulation, storm windows, utility system control units, and other cost-effective energy conservation measures identified in technical surveys.

FY 1987 program

The 1987 Estimate level of $3,421,000 and 55 FTE provides maintenance of BLM-owned water and sewer systems, office buildings, warehouses, shops, storage buildings, fire stations, lookouts, parking areas, and wareyards (outside of western Oregon).

Maintenance includes:

- o Major maintenance work, such as repairing sewage, electrical, heating, ventilating and air conditioning systems, and minor structural repairs;
- o Energy retrofitting, such as installing storm windows, insulation, control systems, and more efficient heating and cooling systems;
- o Minor maintenance work, such as repainting and replacing broken windows; and
- o Grounds work, such as mowing lawns, pruning trees and shrubs, irrigation, and gravel replacement.

Of the approximately 1,400 buildings owned by BLM, about 132 office buildings and over 700 other buildings will be maintained. The buildings scheduled for maintenance are those that are targeted for long-term retention and are needed to accomplish the goals of the organization. BLM will also maintain 97 water and sewage systems. Most of this maintenance work will be accomplished through contractual services for repairing, repainting, and improving electrical, heating, plumbing, and structural systems of these buildings to ensure safe and usable facilities.

RECREATION MAINTENANCE

Objectives

- o Maintain 436 developed recreational sites on the public lands (outside of western Oregon) at a standard that will:
  - - Protect public facilities, investments and resource values; and
  - - Remove or correct health or safety hazards such as inadequate sanitary facilities and hazardous water supplies.
- o Provide cleanup and hazard reduction at about 4,000 undeveloped public land sites receiving recreational use to ensure public safety and to protect the surrounding natural resource values.

Base program

The Base program level is $4,081,000 and 68 FTE. The principal costs of operating and maintaining recreation sites are:

- o trash collection;
- o installation and maintenance of water purification systems;
- o repair of structures (picnic facilities, restrooms, etc.);
- o removal of hazards such as dead trees, excess fire fuel, old mine shafts, etc.; and
- o repair or replacement of signs.

This level of maintenance will ensure safe, hazard-free and sanitary conditions for visitors to the public lands. This includes $2,520,000 for trash collection, installation and maintenance of water purification devices, and repair of facilities at 436 developed recreation sites. The remaining $1,561,000 will be used for cleanup of about 4,000 picnic and undeveloped sites and removal of 300 hazards.

Maintenance of recreational facilities is supplemented by volunteer assistance at both developed and undeveloped sites. Volunteers are assisting with maintenance of campgrounds including trash collection, repairs, and inspections. Cooperative management agreements are also being developed with local clubs or other organizations to maintain recreational sites whenever possible.

To ensure more effective use of maintenance funds, the Bureau is including a periodic maintenance schedule as part of the design requirements on all new projects. During 1987, BLM will maintain 436 developed campsites consisting of 4,726 "Family Units." 1/ Minimum maintenance will be provided for 4,000 picnic and undeveloped sites to protect users' health and safety. Maintenance funds will be concentrated on the most intensively used recreation areas where both visitor use and BLM's investment is the greatest.

Decrease from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
$	4,081	3,681	-400
(FTE-T)	(68)	(65)	(-3)

The proposed decrease will reduce the frequency of maintenance at several of the Bureau's recreation, picnic, and undeveloped sites. The Bureau will defer cleanup of 1,200 picnic and undeveloped sites and removal of 40 hazards. The Bureau will continue to maintain sites in a safe, hazard free, sanitary condition.

Distribution of change by object class

The object class detail for the $400,000 decrease is as follows:

	FTE	Amount
Personnel compensation	3	$ 82,000
Personnel benefits		13,000
Travel and transportation of persons		5,000
Transportation of things		50,000
Other services		230,000
Supplies and equipment		20,000
Total		$400,000

TRANSPORTATION MAINTENANCE

Objective

- To maintain roads, trails, and major bridges on BLM-administered public lands outside of western Oregon in order to:
  - prevent expensive replacement or rehabilitation costs,
  - protect the government and public capital investment,
  - increase the safety of the roads for use by the public and Federal employees,

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1/ A "Family Unit" is the facility that a typical family would use at a developed campground and would normally consist of a parking space, table, and fire or barbecue site with associated water, sewage, and trash facilities.

- reduce erosion, and
- maintain the usefulness of roads for the purposes for which they were constructed.

FY 1987 program

The 1987 Estimate level for the transportation maintenance program is $3,483,000 and 50 FTE.

There are about 44,000 miles of roads, 5,000 miles of trails, and 250 major bridges on public lands outside of western Oregon. Responsibility for maintaining these roads and bridges lies with BLM. At the requested 1987 funding level, the Bureau will:

- o Provide scheduled maintenance on 6,982 miles of road;
- o Maintain 46 bridges; and
- o Provide corrective maintenance on 670 miles of roads and trails.

About 95 percent of BLM road and trail maintenance work is performed by private contractors. Maintenance intensity varies depending on the purpose of the road, but generally includes:

- o Grading to repair damage from erosion;
- o Stabilization of shoulders to protect surfacing;
- o Resealing or repaving;
- o Replacement of individual culverts, and
- o Repair of bridge structures.

In some cases, BLM roads are maintained by others. The principal examples are timber access roads which are usually maintained by timber purchasers during the term of the sale contract (after which the responsibility shifts to BLM).

For BLM scheduled maintenance work, emphasis is placed on those roads, trails, and bridges that receive the greatest use and on roads which have the greatest potential for erosion.

BLM roads represent public investments in public lands. Diligent maintenance reflects proper stewardship of these investments. Corrective maintenance involves the completion of maintenance that is not on a normal schedule and is the result of some abnormal situation which requires immediate corrective action. Examples would include damage to roads from heavy runoff or erosion, flood damage to roads and bridges, obstructions on roads, culvert damage, and others.

ENGINEERING SERVICES

Objectives

- o Provide engineering survey and design and other professional engineering/architectural services for the development and operation of the Bureau's physical facilities;

- Conduct transportation planning in order to inventory, determine condition priority, and develop maintenance schedules for the Bureau's transportation system;

- Provide technical engineering assistance to resource management programs; and

- Operate one BLM sign shop (at Rawlins, Wyoming).

FY 1987 program

The 1987 Estimate is $1,160,000 and 26 FTE. About $1,060,000 will be used for engineering, and $100,000 will be applied to the Bureau's signmaking work.

Engineering services provide essential expertise of professional engineers and architects located at the Denver Service Center to all other Bureau programs. In addition, State Office and District Office engineering personnel perform transportation system management services and contract supervision and administration of both facility construction and major land improvements requiring engineering expertise. Examples of engineering services are:

- Survey and design of timber access roads (to be built by others);
- Survey and design of roads requiring easements;
- Technical assistance for dam and bridge safety inspections, rehabilitation and maintenance;
- Technical assistance for health and safety services at Bureau facilities;
- Review and administration of architectural and engineering source contracts for all programs; and
- Transportation system management functions for all Bureau programs.

In addition to the survey and design work for buildings, roads and trails, and recreation facilities, the Bureau's engineering personnel perform a number of other services including:

- Dam safety review (through design, evaluation, and rehabilitation of structures);

- Expert review of dam safety problems, bridge inspections and repairs, and road washouts in emergency situations; and

- Technical assistance for the design and maintenance of range improvement and wildlife and watershed projects.

Sign Program

The Bureau produces about 10,000 signs annually. If BLM does not make the signs, regulations require the work to be contracted to Federal Prison Industries. Building the signs in-house allows BLM to meet a variety of needs, still conform to standards, and do so at savings to the government by reducing transportation costs.

The 10,000 signs that are installed or replaced each year provide:

- Information to the public at Bureau office complexes and recreational sites;

- Public land location or boundary identification and road directional assistance to the public and for program management purposes; and

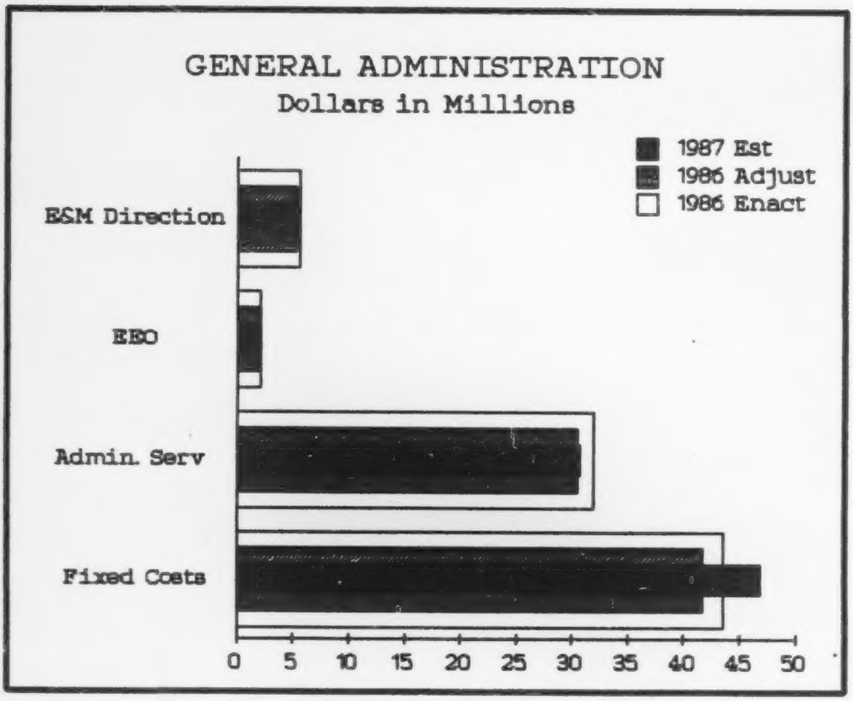
- Safety and interpretive signs to protect the public and help them better understand and appreciate the natural resources around them.

Activity Summary

Activity: General Administration

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
General Administration	83,136	83,101	79,528	80,963	85,101	+4,138



Justification of Program and Performance

Activity: General Administration
Subactivity: General Administration

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Executive and Managerial Direction	$	5,567	5,328	5,525	5,525	---
	(FTE-T)	(98)		(97)	(97)	(---)
Equal Employment Opportunity	$	2,064	1,975	2,056	2,056	---
	(FTE-T)	(60)		(60)	(60)	(---)
Administrative Services and Support	$	31,894	30,523	30,441	30,680	+239
	(FTE-T)	(1,037)		(992)	(992)	(---)
Bureauwide Fixed Costs	$	43,576	41,702	42,941	46,840	+3,899
	(FTE-T)	(---)		(---)	(---)	(---)
Total Requirements	$	83,101	79,528	80,963	85,101	+4,138
	(FTE-T)	(1,195)		(1,149)	(1,149)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
General Administration	83,101	-3,573	79,528

As a result of the $3,573,000 P.L. 99-177 reduction, only the most critical vacant and vacated positions will be filled; purchases of supplies and materials will be deferred; some pending requests to GSA for leased space changes will be deferred, and savings should accrue from delays in space requests which GSA is not expected to accomplish on schedule; the number of permanent change of duty station moves will be reduced; and reductions will be sought in the usage of certain commercial telephone service and equipment.

Authorization

43 U.S.C. 1713, 1748 P. L. 94-579	The Federal Land Policy and Management Act (FLPMA) of 1976, section 301, outlines the functions of the BLM Directorate and provides for administration of the public lands through the Bureau of Land Management, which was established by section 403 of the Reorganization Plan No. 3 of 1946 (43 U.S.C. 1451, note).

42 U.S.C. 2000	Civil Rights Act of 1964, as amended, requires development and maintenance of affirmative action programs to ensure non-discrimination in any employment activity.
Executive Order 11478	Requires establishment and maintenance of affirmative program of equal employment opportunity for all employees and applicants for employment.
P.L. 97-177	Prompt Payment Act of 1982 requires that agencies meet certain deadlines in paying invoices from vendors and include specified payment requirements in procurement documents when they are issued. In addition, the act requires the payment of interest penalties when invoices are not paid on time.

Funding Sources

Funding for the general administration expenses of the Bureau is provided from two sources: (1) the direct appropriation of funds provided from this activity and (2) credits from indefinite appropriation accounts and reimbursements. In 1987, the total estimated funding from all sources is as follows:

Fund Source Table
(Dollar amounts in thousands)

Source	1985 Actual	1986 Estimate	1987 Estimate
General Administration, BLM	$83,136	$83,101	$85,101
BLM-Reimbursements	1,112	850	850
Range Improvements appropriation	600	600	600
Payments in Lieu of Taxes appropriation	200	200	200
Service Charges, Deposits, & Forfeitures appropriation	443	366	770
Road Maintenance-Permanent appropriation	273	280	280
Trust Funds	326	70	70
Total Available	$86,087	$85,467	$87,871

Objective

The objective of the general administration activity is to provide general administrative support to all Bureau programs and organizational levels in order to function effectively, and to provide that support at the lowest possible cost. These services include executive and managerial direction, equal employment opportunity programs, financial management, records and directives systems management, budget development and execution, personnel administration, procurement and contracting services, property management, and funding for a variety of Bureauwide fixed costs.

The 1987 Estimate for general administration is a proposed funding level that is only 14.6 percent of the total 1987 Estimate for the Bureau. This percentage is well within recognized acceptable limits for administrative costs and efficiency.

EXECUTIVE AND MANAGERIAL DIRECTION

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate	
	FTE	$	FTE	$	FTE	$
Executive & Managerial Direction	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Executive Direction -						
Headquarters Office	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
State Offices/SSC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Managerial Direction -						
District Offices	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

FY 1987 program

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

EQUAL EMPLOYMENT OPPORTUNITY

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		FY 1987 Estimate	
	FTE	$	FTE	$	FTE	$
Equal Employment Opportunity	60	2,066	60	2,056	60	2,056
Headquarters Office	13	536	13	530	13	530
Field	47	1,530	47	1,526	47	1,526

FY 1987 program

The 1987 program for equal employment opportunity (EEO) is $2,056,000 and 60 FTE.

The Bureau EEO Office is responsible for the development, implementation, and evaluation of the Bureau's EEO program. Field level EEO Officers in the State Offices and other units perform corresponding functions within their areas of responsibility.

The Bureau's Equal Employment Opportunity program provides for compliance with the Civil Rights Act of 1964, the Equal Employment Opportunity Act of 1972, Executive Order 11478, the Civil Service Reform Act, Departmental Directives, and related statutes, regulations and orders designed to prevent discrimination in Bureau hiring and employment practices. The program provides for the processing of EEO discrimination complaints, the coordination of the Federal Equal Opportunity Recruitment Program (FEORP) and other special emphasis equal opportunity projects and services. Included are the Federal Women's Program, the Hispanic Employment Program, and outreach efforts to bring qualified minorities and women into significant roles in the Bureau's workforce by utilizing cooperative education and other agreements with institutions of higher education. Also, managers are assisted in the identification and utilization of opportunities for the career development of minorities and women in the workforce. EEO training expertise provides required EEO-related training based on need-specific requirements.

Pursuant to Executive Order 12320, the Bureau administers the Historically Black Colleges and Universities Program Initiative as a key component of civil rights compliance responsibilities of the Office of Equal Employment Opportunity. Four of the five programmatic areas identified by the Office of Historically Black Colleges and Universities Program, (i.e., Education and Training, Special Projects, Public Information, and Private Sector Involvement) will be emphasized in 1987.

Preliminary planning and pilot implementation have been completed to extend field participation and involvement in Title VI compliance, specifically, Recreation and Public Purposes Act interests, and in Title VII work. The program is emphasizing professional conflict management capabilities to further increase cost-effectiveness in the management and adjudication of civil rights issues as a means of reducing the extreme expenses often associated with litigation of these matters.

Projected workload accomplishments include:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Informal complaints	360	380	380	---
Formal complaints	25	37	45	+8
Complaints resolved/adjusted	38	38	38	---
EEO counselors trained	50	45	40	-5
Administrative inquiries performed	2	5	5	---

ADMINISTRATIVE SERVICES AND SUPPORT

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate		Inc(+) or Dec(-))	
	FTE	$	FTE	$	FTE	$	FTE	$
Administrative Services and Support	1,037	31,894	992	30,441	992	30,680	---	+239

The table below compares the individual program element costs for 1986, 1987 base and 1987 Estimate.

	1986 Estimate		1987 Base		1987 Estimate		Inc(+) or Dec(-)	
	FTE	$	FTE	$	FTE	$	FTE	$
Public Affairs & Information	24	871	24	869	24	869	---	---
Budget Development and Execution	79	2,843	77	2,760	77	2,760	---	---
Procurement and Property Management	444	13,835	431	13,426	431	13,635	---	+209
Personnel, Training, and Safety	225	7,106	195	6,163	195	6,193	---	+30
Financial Management	93	2,563	93	2,557	93	2,557	---	---
Records & Directives Systems Management	138	3,464	138	3,456	138	3,456	---	---
Other Management Support	34	1,212	34	1,210	34	1,210	---	---
TOTAL	1,037	31,894	992	30,441	992	30,680	---	+239

Base program

The administrative services and support element provides basic services which are essential to the entire Bureau organization to sustain ongoing operations and program accomplishment for all the Bureau's direct operating appropriations (i.e., Management of Lands and Resources, Oregon and California Grant Lands, Construction and Access, and Land Acquisition).

A reduction of $1,384,000 and 45 FTE is included as an adjustment to the 1987 base for the estimated amount of management initiative savings that would be achieved from streamlining, consolidation of operations, and improved administrative servicing ratios in certain administrative functions.

The various administrative services and support program elements are described below.

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate	
	FTE	$	FTE	$	FTE	$
Public Affairs and Information	24	871	24	869	24	869
Headquarters Office	13	515	13	514	13	514
Field	11	356	11	355	11	355

At the headquarters level, the public affairs staff is responsible for Bureauwide public affairs program development, oversight of policies and practices for involving the public in Bureau decisions, and for developing and maintaining productive working relationships with other Federal, State, and local agencies and user groups. The staff develops and provides guidance for Bureauwide formal cooperative agreements with such agencies and groups and manages the Bureau's publications program.

The staff also provides public information at the national level and provides advice to field line managers on public affairs, media relations and information matters. It ensures that appropriate channels are available for communicating with both public land users and the general public about resource issues.

At the field level, the public affairs staffs provide overall program assistance, support and guidance to State directors and district managers in the same program areas addressed by the Headquarters office. Direct informational and public participation efforts by field public affairs staffs in support of individual program requirements are funded by the benefiting activity or subactivity.

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate	
	FTE	$	FTE	$	FTE	$
Budget Development and Execution	79	2,843	77	2,760	77	2,760
Headquarters Office	22	897	20	818	20	818
Field	57	1,946	57	1,942	57	1,942

All Bureau organizational units and levels have some role to perform in BLM's budgeting and programming efforts. The headquarters budget office staff is responsible for the general management of the budget formulation and execution work involving BLM's appropriations and other funding authorities. The office also develops and presents the Bureau's budget estimates and prepares budget justifications. It prepares, monitors, and analyzes other program and budget documents, including the annual work plan, the current year operating budgets, and program year budget plans for out-year budget development.

The budget office staff is responsible for budget execution, for ensuring compliance with the provisions of the appropriations acts, and for fund control to prevent overobligation of funds. The staff prepares cost and manpower estimates, supplemental and reprogramming requests, and status of requirements analyses. The budget office is supported in this effort by program specialists from each part of the headquarters organization relative to their own programs' specific budgetary requirements.

In the field, the personnel necessary to operate various phases of overall budget formulation and execution for their organizational units are located in the State and district offices and at the Service Center. The funds identified above include only the costs of the budget and programming work performed on a Bureauwide, Statewide or officewide basis. Budgetary and program development work required in direct support of individual programs is funded by the benefiting activity or subactivity.

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate		Inc(+) or Dec(-)	
	FTE	$	FTE	$	FTE	$	FTE	$
Procurement and Property Management	444	13,835	431	13,426	431	13,635	---	+209
Headquarters Office	31	2,299	30	2,254	30	2,289	---	+35
Field	413	11,536	401	11,172	401	11,346	---	+174

At the Headquarters level, the procurement and property management staffs:

- Plan and direct the Bureau's procurement, space management, and property management to ensure responsiveness to program needs and coordination with other Bureau programs;
- Provide program direction, goal development, and liaison with other governmental and private organizations for the Bureau's Small and Disadvantaged Business Utilization Program;
- Develop directives and other guides regarding procurement and property management functions to ensure conformity with Federal laws and regulations, and process and issue contracting officer warrants for the Bureau;
- Identify needs for regulatory changes and provide advice and assistance to the Department in their preparation;

- o Maintain liaison with vendors, manufacturers, and trade associations to stay abreast of new technology and market developments in Bureau procurement areas; and

- o Provide operational general services such as purchasing, space management, printing management, and duplicating services for the headquarters office.

- o Also, internal mail routing and processing services for the headquarters office were provided until March 1985. At that time, employees in the Bureau's mailroom were transferred to a consolidated Departmental mail unit to reduce overall costs and increase internal mail processing efficiencies. Therefore, the 1986 and 1987 Estimates both already include a reduction of $167,000 and 9 FTE below the 1985 level previously justified as part of a 10 percent management initiative saving in BLM's 1986 Budget Justifications.

At the field level, the procurement and property management staffs implement these various systems and manage the operational aspects of procurement; property management; receiving, storing and issuing property; project materials and supplies; and space management required to support the organization's functions.

Procurement and contracting organizations at all levels of BLM purchased goods and services totaling about $83.1 million in 1985. This included about $47.3 million in contracts for supplies, services, studies and construction work. It also included $35.8 million in small purchases (awards under $10,000 each) and other actions processed by procurement staffs throughout the Bureau.

The property management workload includes inventory and control of:

- o Capitalized and Major Noncapitalized Equipment comprising approximately 104,000 items valued at $138 million (acquisition value).

- o Project materials (stores) comprising regular program stores of approximately $2.9 million in acquisition value, and fire stores of approximately $7.4 million in acquisition value.

- o Motor Vehicle and Heavy Equipment Management consists of: BLM-Owned - Approximately 1,900 motor vehicles and 500 self-propelled equipment units (tractors, road graders, forklifts, snowmobiles, etc.), and GSA-Motor Pool Assignments - Approximately 2,850 motor vehicles.

- o Real Property:
  BLM-Owned - 1,543 buildings for program administration and management containing 1.8 million square feet.

- o GSA Leased (FY 1987)
  1.4 million square feet of office space, and
  2.9 million square feet of storage, parking, and other space

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate		Inc(+) or Dec(-)	
	FTE	$	FTE	$	FTE	$	FTE	$
Personnel, Training and Safety	225	7,106	195	6,163	195	6,193	---	+30
Headquarters Office	33	1,109	30	988	30	995	---	+7
Field	192	5,997	165	5,175	1635	5,198	---	+23

The Headquarters office personnel, training and safety staffs formulate objectives, policies, and guidelines for Bureauwide activities. More specifically, the staffs:

- Develop comprehensive personnel management programs covering all personnel functions to meet BLM mission accomplishment in compliance with laws, regulations, and public policies. This includes programs and policies for operating personnel offices in the Headquarters offices, the Service Center, State Offices and other Bureau offices where personnel authority is currently delegated;

- Develop policies and programs to implement provisions of the Civil Service Reform Act of 1978, including merit pay for supervisors and the Senior Executive Service;

- Develop policies and programs to implement the Bureau's Performance Improvement Systems, Incentive Awards Program, orientation, training, and planned employee development activities;

- Develop policies and programs to carry out Bureau responsibilities for position classification; merit promotion and internal placement plans; upward mobility; cooperative education; summer and seasonal employment; Federal Equal Opportunity Recruitment Program; and special emphasis programs designed to address the employment needs of handicapped, disadvantaged, underutilized and others identified by statute or regulations;

- Develop policies, programs, and objectives for the Bureau's international cooperative and technical assistance programs;

- Provide technical advice and assistance for Bureau technical training courses and training centers, including providing technical criteria and procedures on a Bureauwide basis. Provide executive and management training and other special employee development programs; and

- Develop, administer, and evaluate a program to further the occupational health and safety of Bureau employees and the safety of public land visitors.

The Headquarters, Service Center, and State Office servicing personnel staffs also provide the following services to subordinate offices:

- Technical advice and assistance to line management concerning labor relations activities that involve Bureau offices and employees. Over 2,200 Bureau employees are represented by two unions at 20 geographic locations.

Additionally, the National Federation of Federal Employees has been accorded a national consultation right since they represent more than 10 percent of Bureau employees. This requires the Bureau to inform the union of any substantive change in conditions of employment proposed by BLM management and to consider their views and recommendations prior to final implementa- tion; and

- Counseling of employees including advice, assistance, interpretation, and guidance concerning the Department's regulations relating to responsibilities, conduct, and employee rights. Conduct technical reviews of and make recommendations regarding employee complaints, adverse actions or grievance cases on appeal to the Director. Of particular importance is the Bureauwide conflict of interest program which entails the services of 2 full-time and 15 collateral duty employees who personally contact 3,500 employees to obtain 4,500 forms related to financial disclosure requirements under 6 statutes.

The servicing personnel specialists and clerks in each State Office and in other field offices carry out the operational aspects of the program, which include:

- Staffing and organizational analysis and classification review of 8,000 positions;
- Processing 35,000 personnel actions and issuing 2,000 vacancy announcements annually involved in the process of selecting, appointing, reassigning, promoting and releasing employees;
- Determining training needs and advising supervisors on training opportunities;
- Developing and managing a program to ensure that employees receive proper orientation and the training needed to perform assigned duties at an acceptable level of performance; and processing 1,446 employee performance awards;
- Providing information on employee benefits and retirement procedures and processing transfers; and
- Handling approximately 300 employee grievances and formal complaints.

A major cost savings is expected to result from meeting a Bureauwide ratio of one personnelist to each 60 employees. It is estimated that this management initiative saving will be 30 FTE and $925,000.

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate	
	FTE	$	FTE	$	FTE	$
Financial Management	93	2,563	93	2,557	93	2,557
Headquarters Office	12	407	12	406	12	406
Field	81	2,156	81	2,151	81	2,151

The Headquarters Office finance staff directs the operation and improvement of the Bureau's integrated appropriation/cost accounting system to meet all managerial and legal accounting and financial management requirements, and specifically:

- o Develops and provides guidance, implements and reviews accounting policies and procedures to maintain an efficient accounting system that is fully integrated with the Bureau's budgeting system and is consistent with the requirements of the General Accounting Office, the Office of Management and Budget, the Department of Treasury, General Services Administration, and the Office of the Secretary. Continuing Treasury and OMB innovations relating to cash transactions and reporting have required frequent revisions to the automated financial management system and internal control mechanisms;
- o Provides policy, program guidance, and technical assistance on financial control systems to Headquarters program offices, field offices, and the Service Center, with particular emphasis on fund accountability, accounting systems, receipt collections, payroll, voucher auditing, and making disbursements to meet Departmental and Federal accounting requirements;
- o Provides guidance and technical assistance for Bureauwide cost recovery programs and monitors billings and recovery of funds on major rights-of-way projects;
- o Develops policies, provides technical advice, and implements systems and procedures for processing and recording receipts from sales and leases of lands administered by the Bureau and the disposition of these funds, payments, and loans to State and local governments;
- o Administers and implements the provisions of the Payments in Lieu of Taxes Act (P.L. 94-565), as amended, and provides advice, guidance and coordination with Federal, State and local government officials; and
- o Investigates and processes tort claims.

The Service Center (DSC) financial operations division processes financial documents that have been initiated at BLM field offices and maintains the Bureau's system of accounts and financial management reports, audits vouchers, billings and invoices; processes payments; handles receivables; and accounts for receipts. Finance personnel, process approximately 158,000 payments, and 227,000 billing, collection, and other miscellaneous accounting documents each year.

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate	
	FTE	$	FTE	$	FTE	$
Records and Directives Systems Management	138	3,464	138	3,456	138	3,456
Headquarters Office	12	420	12	419	12	419
Field	126	3,044	126	3,037	126	3,037

The records, paperwork and directives management staffs in the Headquarters Office and at all organizational levels maintain the official files, central records and Bureau directives in accordance with the Bureauwide program for paperwork management. The Headquarters staff develops standards and procedures and reviews all directives issued by the Director's Office. The Denver Service Center staff provides assistance, training and quality control. The BLM's record holdings are comprised of 130,400 cubic feet of records and 55,300 cubic feet of library reference material.

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate	
	FTE	$	FTE	$	FTE	$
Other Management Support						
Headquarters Office	34	1,212	34	1,210	34	1,210

This category includes the Headquarters staffs that support the directorate and field level executives on matters involving congressional liaison, legislation and regulatory management, program evaluation, and management analysis. The cost and FTE breakdown for other management support includes the following:

(Dollar amounts in thousands)

	1986 Estimate		1987 Base		1987 Estimate	
	FTE	$	FTE	$	FTE	$
Congressional Liaison	3	160	3	160	3	160
Management Support	31	1,052	31	1,050	31	1,050

Increase from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	30,441	30,680	+239
(FTE-T)	(992)	(992)	(---)

The increase of $239,000 is needed for the following purposes:

o An increase of $30,000 for costs of using the unemployment compensation contract and for increased costs of adjudication of personnel classification appeals. The Department of Agriculture (USDA) has agreed that bureaus and offices in the Department of the Interior may use the services of a firm already under contract with USDA to improve controls in their employee unemployment compensation program. The contractor edits unemployment compensation claims from former Bureau employees that are received from the various State agencies and ensures that the claims are valid. Until now bureaus in the Department of the Interior have not had an effective method of evaluating the validity of bills that are received from the Department of

Labor (DOL) for unemployment benefits paid to former employees. This contract service should provide a method of verifying DOL bills in the future and should result in reduced unemployment compensation claim costs to the Bureau in the future. Additionally, the Department has obtained contractual assistance for adjudication work on personnel classification appeals. The cost associated with this work for the BLM is charged to the Bureau. An increase of work in this function has occurred over the past several years.

- An increase of $209,000 for increased volume and cost of administrative duplicating and priority printing work.

Although significant efforts have been made to reduce in-house copy equipment needs and minimize the volume of work for printing, duplicating, and copying services, the Bureau has experienced an increase in the cost and workload demand for these services which are provided by the Departmental printing plant and by commercial printing firms.

Distribution of change by object class

The object class detail for the $239,000 increase is as follows:

	Amount
Printing and reproduction	$209,000
Other services	30,000
Total	$239,000

BUREAUWIDE FIXED COSTS

Base program

The table below compares the individual item costs for 1986, 1987 Base, and 1987 Estimate, and shows the increase of the 1987 Estimate from the 1987 Base.

(Dollar amounts in thousands)

Cost Item	1986 Estimate	1987 Base	1987 Estimate	Inc. (+) or Dec. (-)
Space Rental (GSA)	25,994	25,057	25,057	---
General Purpose Wire Communications	(7,787)	(7,787)	(9,206)	(+1,419)
FTS	1,955	1,955	2,105	+150
Commercial Telephone	5,552	5,552	6,821	+1,269
Facsimile Equipment	280	280	280	---
Permanent Change of Duty Station Costs	3,100	3,100	5,113	+2,013
Mail and Postal Service	3,000	3,000	3,000	---
Injured Employee Compensation	1,905	2,207	2,207	---
Unemployment Compensation	1,400	1,400	1,400	---
Departmental Services	390	390	857	+467
Total, Fixed Costs	43,576	42,941	46,840	+3,899

Item Description and Justification of Change from Base:

Space Rental - The 1987 level is $25,057,000 at both the Base and Estimate levels.

This amount is GSA's 1987 estimate of the Commercially Based Rent (Rent) charge for rental of office, warehouse, storage, and other facilities which are occupied by BLM. This estimate includes the Bureau's share of the cost of Departmentally controlled space in the Main Interior building. The amount of $25,057,000 represents a 4 percent decrease from the 1986 level, mostly because of the reappraisal by GSA of rental rates on all its leased space, as required under the new rent system which replaces the Standard Level User Charge (SLUC) rate structure in 1987. The reappraised rental rates in the Western United States, where most BLM leased space is located, are generally lower than they were under the SLUC. The original rent rates proposed by GSA for 1987 were actually higher than for 1986 SLUC; but, based upon direction from the Office of Management and Budget to GSA, the rates were reduced by 15 percent. GSA has indicated that the full commercial equivalent rent rates are scheduled for implementation in 1988.

General Purpose Wire Communications - The 1987 Base is $7,787,000, and the Estimate is $9,206,000; an increase of $1,419,000.

This cost includes:

	FY 1987 Base	FY 1987 Estimate	Difference
FTS Charge	1,955	2,105	+150
Commercial telephone	5,552	6,821	+1,269
Facsimile equipment	280	280	---

The FTS estimate reflects anticipated rate increases which will, to a large degree, offset the anticipated decrease in line-minute usage.

As a result of the AT&T divestiture, commercial telephone costs have been increasing and are expected to increase each year through 1987, mostly due to the effect of acquisition cost of administrative telephone systems. At the time that divestiture took effect, AT&T assumed ownership of all phone systems that were previously available to customers on a lease basis; and, as a result, it became necessary for phone system users such as BLM to buy replacement systems. The Bureau is planning to purchase the systems on a competitive basis each year through 1987, resulting in an additional need of $1,269,000.

Permanent Change of Duty Station Costs - The 1987 Base is $3,100,000, and the Estimate is $5,113,000, an increase of $2,013,000.

The increase of $2,013,000 is needed to pay the increasing costs of transferring Bureau employees among locations to meet changing workloads of Bureau organizations and to cover the rising costs resulting from changes in allowable rates and benefits to employees who will be or have been transferred through a permanent change of duty station.

Public Law 98-151, signed on November 14, 1983, provided for significant increases in moving allowances for Federal employees, including several significant new relocation benefits. In 1984, the first year the Act and its regulations were implemented, Bureau costs for interstate transfers of personnel at grade GS-11 or above amounted to approximately $4.3 million. Assuming the level of transfers remains constant in 1987, an increase of $1,200,000 will be needed simply to cover the additional relocation costs.

Additionally, P.L. 98-151 provided for a relocation income tax (RIT) allowance for reimbursement of additional Federal, State, and local income taxes incurred by transferred Federal employees as a result of certain relocation expense reimbursements. Since implementing instructions for RIT were not issued by GSA until April 1985, and not approved for implementation in the Department until later, no costs for this new allowance were incurred until 1986. Estimates of the full actual cost to the Bureau of these benefits remains uncertain; however, our current estimate is that the additional 1987 funding needed to cover RIT costs will be $490,000.

P.L. 98-151 also authorizes agencies to provide additional relocation services to employees and to contract with private firms to provide these services. Accordingly, at the Interior Department's request, GSA has established a contract for relocation services which should be implemented during 1986 and will include the following services: guaranteed home sale for eligible employees transferred for the benefit of the Government; home-finding assistance for employees desiring to purchase or rent at the new location; home marketing assistance; and mortgage-finding assistance. The estimated additional 1987 funding needed to cover the Bureau's share of relocation services under the contract is $323,000.

Mail and Postal - The 1987 Estimate is $3,000,000.

The U.S. Postal Service (USPS) assesses the Bureau for mail and postal tariffs. The 1987 Estimate assumes no postal rate increases during 1987 and no change in the Bureau's volume of mail from the 1986 level.

Injured Employee Compensation - The 1986 Estimate is $2,207,000.

The Department of Labor (DOL) annually assesses the Bureau of Land Management for costs of compensation and medical benefits paid to current and former employees injured on the job. The amounts are reimbursed to the DOL Employee Compensation Fund.

Unemployment Compensation - The 1986 Estimate is $1,400,000.

The Omnibus Reconciliation Act of 1980 (P.L. 96-499) requires that all unemployment benefits paid to former Federal employees, based on Federal service performed after December 31, 1980, must be reimbursed to the Federal Employees Compensation Account of the Unemployment Trust Fund by the various Federal agencies. The Department of Labor issues bills to the Interior Department which are subsequently allocated to the Bureaus for payment of amounts to reimburse the Unemployment Trust Fund.

Departmental Services - The 1987 Base is $390,000, and the Estimate is $857,000. There is an increase of $467,000.

This estimate represents the Bureau's share of costs for common services provided in Washington and in Main Interior Building at the Departmental level such as health services, building security, library, and central support management services. Of the total increase requested, $167,000 is for BLM's share of the cost of centralized mail processing services that the Department provides for all bureaus and offices located at the Interior Complex (Interior and Interior South buildings) in Washington. The remaining $300,000 increase is for the Bureau's estimated share of costs for a new telephone switchboard system that the Department is expected to install in the Main Interior Building in 1987. This system is expected to result in long-term savings in telephone costs.

Distribution of change by object class

The object class detail for the proposed general administration increase of $3,099,000 is as follows:

	Amount
Personnel benefits	$1,107,000
Transportation of things	178,000
Communities, utilities, and miscellaneous charges	1,728,000
Other services	117,000
Total	$3,099,000

BLM

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Management of Lands and Resources

	[illegible]		[illegible]		Inc. (+) or Dec. (-)	
	FTE	Amount	FTE	Amount	FTE	Amount
Object Class						
11. Personnel compensation:						
11.1 Permanent positions ...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11.3 Positions other than permanent ...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11.5 Other personnel compensation 1/ ...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11.8 Special personal services payments ...	---	[illegible]	---	[illegible]	---	---
Total personnel compensation	[illegible]	[illegible] 2/	[illegible]	[illegible] 2/	[illegible]	[illegible]
Other Objects						
12.1 Personnel benefits ...		[illegible]		[illegible]		[illegible]
13.0 Benefits to former personnel ...		[illegible]		[illegible]		---
21.0 Travel & transportation of persons ...		[illegible]		[illegible]		[illegible]
22.0 Transportation of things ...		[illegible]		[illegible]		[illegible]
23.1 Standard level user charges ...		[illegible]		[illegible]		---
23.2 Rental payments to others ...		[illegible]		[illegible]		---
23.3 Communications, utilities, and miscellaneous charges ...		[illegible]		[illegible]		[illegible]
24.0 Printing and reproduction ...		[illegible]		[illegible]		[illegible]
25.0 Other services ...		[illegible]		[illegible]		[illegible]
26.0 Supplies and materials ...		[illegible]		[illegible]		[illegible]
31.0 Equipment ...		[illegible]		[illegible]		[illegible]
32.0 Lands and structures ...		[illegible]		[illegible]		[illegible]
42.0 Insurance claims and indemnities ...		[illegible]		[illegible]		---
Total Requirements ...		[illegible]		[illegible]		[illegible]

1/ [illegible]

2/ [illegible]

STANDARD FORM 300 [illegible]

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
Program and Financing (in thousands of dollars)

Identification code 14-1109-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
Direct program:			
00.01 Energy and minerals management	74,553	83,903	77,572
00.02 Lands and realty management	41,745	41,717	38,454
00.03 Renewable resources management	115,242	117,894	107,813
00.04 Planning and data management	23,443	23,148	22,413
00.05 Cadastral survey	26,596	26,756	22,691
00.06 Firefighting and rehabilitation	74,222	4,376	4,376
00.07 Technical services	14,121	15,480	15,063
00.08 General administration	83,119	83,101	85,131
00.91 Total direct program	453,134	396,175	375,645
01.01 Reimbursable program	14,909	15,000	15,000
10.00 Total obligations	468,043	411,175	390,645

STANDARD FORM 300

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
Program and Financing (in thousands of dollars)

Identification code 14-1109-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Financing:			
Offsetting collections from:			
11.00 Federal funds	-11,020	-11,000	-11,000
14.00 Non-Federal sources	-3,889	-4,000	-4,000
25.00 Unobligated balance lapsing	2,319	---	---
39.00 Budget authority	455,453	396,175	375,685
Budget authority:			
40.00 Appropriation	500,572	398,566	375,685
40.00 Reduction pursuant to P.L. 98-190	---	-2,391	---
41.00 Transferred to other accounts	-45,119	---	---
43.00 Appropriation (adjusted)	455,453	396,175	375,685
Relation of obligations to outlays:			
71.00 Obligations incurred, net	453,134	396,175	375,685
72.40 Obligated balance, start of year	62,273	64,293	55,966
74.40 Obligated balance, end of year	-64,293	-55,966	-52,893
77.00 Adjustments in expired accounts	-2,120	---	---
90.00 Outlays	448,994	404,502	378,758

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
Object Classification (in thousands of dollars)

Identification code 14-1109-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent	203,383	202,664	196,168
11.3 Other than full-time permanent	18,769	4,558	4,637
11.5 Other personnel compensation	12,238	12,250	12,250
11.8 Special personal services payments	3,979	500	500
11.9 Total personnel compensation	238,369	219,972	213,555
12.1 Personnel benefits: Civilian	36,993	34,096	33,101
13.0 Benefits to former employees	501	500	500
21.0 Travel and transportation of persons	12,639	16,000	16,500
22.0 Transportation of things	14,534	10,000	10,000
23.1 Standard level user charges	23,334	25,994	25,057
23.2 Rental payments to others	619	600	600
23.3 Communications, utilities, and miscellaneous charges	18,079	15,000	15,000
24.0 Printing and reproduction	3,096	2,500	2,000
25.0 Other services	71,235	49,448	37,347
26.0 Supplies and materials	24,931	15,000	15,000
31.0 Equipment	7,703	6,000	6,000
32.0 Lands and structures	1,000	1,000	1,000
42.0 Insurance claims and indemnities	101	25	25
99.0 Subtotal, direct obligations	453,134	396,175	375,685

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
Object Classification (in thousands of dollars)

Identification code 14-1109-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Reimbursable obligations:			
Personnel compensation:			
11.1 Full-time permanent	3,548	3,195	3,005
11.3 Other than full-time permanent	1,181	1,075	1,015
11.5 Other personnel compensation	331	300	300
11.9 Total personnel compensation	5,060	4,570	4,320
12.1 Personnel benefits: Civilian	625	565	535
21.0 Travel and transportation of persons	622	625	625
22.0 Transportation of things	299	300	300
23.3 Communications, utilities, and other rent	731	750	750
24.0 Printing and reproduction	205	200	200
25.0 Other services	4,603	5,230	5,510
26.0 Supplies and materials	2,145	2,150	2,150
31.0 Equipment	566	560	560
32.0 Lands and structures	53	50	50
99.0 Subtotal, reimbursable obligations	14,909	15,000	15,000
99.9 Total obligations	468,043	411,175	390,685
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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
Personnel Summary

Identification code 14-1109-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Direct:			
Total number of full-time permanent positions	7,358	7,332	7,097
Total compensable workyears:			
Full-time equivalent employment	8,544	8,520	8,286
Full-time equivalent of overtime and holiday hours	372	372	372
Average ES salary	67,458	67,458	67,458
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306
Reimbursable:			
Total number of full-time permanent positions	131	118	111
Total compensable workyears:			
Full-time equivalent employment	188	170	160
Full-time equivalent of overtime and holiday hours	12	12	12
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306
(Memo cast: 21.5)	(Memo cast: 3)	(Memo cast: 3)	(Memo cast: 4.9)

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
(P.L. 99-177 Sequestration)
Program and Financing (in thousands of dollars)

Identification code 14-1109-6-1-302	19 85 actual	19 86 estimate	19 87 estimate
10.00 Total obligations............	---	-17,208	---
Financing:			
25.00 Unobligated balance lapsing......	---	172	---
40.00 Budget authority............	----	-17,036	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	---	-17,036	--
72.40 Obligated balance, start of year.	---	---	-2,579
74.40 Obligated balance, end of year...	---	2,579	---
90.00 Outlays......................	---	-14,629	-2,579
(Memo cast: 21.5)	(Memo cast: 5)	(Memo cast: 5)	(Memo cast: 4.6)

Management of Lands and Resources

(Separate Transmittal for Proposed Legislation) BLM/Forest Service Interchange

Summary

The President's Budget includes a separate request of $3,400,000 for the "Management of Lands and Resources" account for BLM to implement the proposed BLM/Forest Service Interchange in 1987. A legislative proposal to authorize the interchange is expected to be submitted to Congress in February 1986.

Justification

The Forest Service (FS) and Bureau of Land Management (BLM) each have jurisdiction over various tracts of public land in the Western United States, and many of these lands are in the same general proximity. Likewise, each agency has staff and offices in most of these locations to carry out the work for which it is responsible.

The BLM and FS are currently preparing a legislative proposal for the interchange that is scheduled to be submitted to Congress in February 1986. The proposed interchange of land management assignments between the FS and BLM will result in a single agency having administrative responsibility over all lands within most geographic areas. This should also result in the consolidation of a number of existing BLM/FS offices. The benefits would be improved service to the public and more cost efficient and effective operations.

The proposed jurisdictional interchange is projected to result in savings of $1.4 million for BLM in 1987, largely from a reduction of 37 FTE in the initial year.

Total implementation costs in 1987 are projected to be $4.8 million. These costs are expected to be partially offset by $1.4 million in savings that would be realized. The $3.4 million expected to be requested along with the legislative proposal represents the net of BLM's 1987 costs and savings. Remaining costs ($1.4 million) will be charged to those same accounts where the savings are expected to accrue. Implementation expenses include costs of consolidation of office locations, relocation expenses for some employees, and other administrative costs which are necessary for such a reorganization.

The costs and savings projected here are preliminary estimates, and they may be expected to change as final adjustments take place. Following congressional action on the proposal, it will probably be necessary to prepare and submit revised or amended Budgets to reflect both actual implementation costs and the expected program effects on the various subactivity funding levels which will result from the interchange of management responsibilities.

Some adjustments between BLM and FS accounts may also be required after legislation is enacted to authorize the interchange and jurisdictions are actually transferred between agencies.

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
(Proposed for later transmittal, proposed legislation)
Program and Financing (in thousands of dollars)

Identification code 14-1109-2-1-302	85 actual	86 estimate	87 estimate
Program by activities:			
10.00 Total obligations............	---	---	3,400
Financing:			
40.00 Budget authority (appropriation)	---	---	3,400
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	---	---	3,400
74.00 Obligated balance, end of year...	---	---	-140
90.00 Outlays......................	---	---	3,260
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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
(Proposed for later transmittal, proposed legislation)
Object classification (in thousands of dollars)

Identification code 14-1109-2-1-302	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation:			
11.1 Full-time permanent.............	---	---	-887
11.3 Other than full-time permanent..	---	---	-125
11.5 Other personnel compensation....	---	---	-50
11.9 Total personnel compensation..	---	---	-1,062
12.1 Personnel benefits: Civilian.....	---	---	-165
21.0 Travel and transportation of persons	---	---	500
22.0 Transportation of things..........	---	---	1,400
23.3 Communications, utilities and miscellaneous charges..........	---	---	900
25.0 Other services....................	---	---	927
26.0 Supplies and materials............	---	---	900
99.9 Total obligations.............	---	---	3,400

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MANAGEMENT OF LANDS AND RESOURCES
(Proposed for later transmittal, proposed legislation)
Personnel Summary

Identification code 14-1109-2-1-302	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	---	---	-37
Total compensable workyears: Full-time equivalent employment	---	---	-37
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306

Appropriation Summary Statement

Appropriation: Construction and Access

This appropriation provides funds to meet two major objectives:

- To construct buildings, recreation facilities, roads, trails, and bridges necessary for the management of public lands and for providing physical access to these lands.

- To provide public access to Federal lands for appropriate uses by acquiring those legal rights (easements for road and trail access) on non-Federal lands that are essential to implement planned BLM resource management programs (particularly forestry and recreation).

No construction projects are planned for 1987. Construction of new facilities for BLM in Fairbanks, Alaska is being accomplished with carryover funds appropriated in prior years plus funds provided by the Department of the Army. An amount of $1,200,000 is requested for access purposes to obtain 150 easements across non-Federal land to BLM-managed lands.

Appropriation Language Sheet

Construction and Access

For acquisition of lands and interests therein, and construction of buildings, recreation facilities, roads, trails, and appurtenant facilities, [$1,403,000] $1,200,000, to remain available until expended.

(43 U.S.C. 1701, 1715, 1762; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190).

Appropriation Language Citations

Appropriation: Construction and Access

1. For acquisition of lands and interests therein, and construction of buildings, recreation facilities, roads, trails, and appurtenant facilities, [$5,465,000] $1,700,000, to remain available until expended.

43 U.S.C. 1701
43 U.S.C. 1715
43 U.S.C. 1762
P.L. 99-190

43 U.S.C. 1701 provides for the retention of public lands in Federal ownership; for periodic and systematic inventory of the public lands and their resources; for a review of existing withdrawals and classifications; for establishing comprehensive rules and regulations for administering public land statutes; for multiple-use management on a sustained yield basis; for protection of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; for receiving fair market value for the use of the public lands and their resources; for establishing uniform procedures for disposals, acquisitions, and exchanges; for protection of areas of critical environmental concern; and for recognizing the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands, including implementation of the Mining and Minerals Policy Act of 1970.

43 U.S.C. 1715 provides for the Secretary of the Interior to acquire by purchase, exchange, donation, or eminent domain (for access to public lands only), land and interests in lands.

43 U.S.C. 1762 provides for the acquisition, construction, and maintenance of roads within and near the public lands which will permit maximum economy in harvesting timber from such lands tributary to such roads and at the same time meet the requirements for protection, development, and management of such lands for utilization of the other resources.

P.L. 99-190, the FY 1986 Appropriations Act for the Department of the Interior and Related Agencies, provides funding for programs in 1986.

Budgetary Resources for Construction and Access

BUREAU OF LAND MANAGEMENT

Account: Construction and Access ([illegible])

FY 1986 Budgetary Status

Budget authority available:

Appropriation enacted	[illegible]
[illegible] Budget Authority [illegible]	[illegible]
Unobligated [illegible] balance brought forward	[illegible]
Total BA available for obligation	[illegible]

Less: anticipated obligations by activity:

1. Construction	[illegible]
2. Access	[illegible]
Total anticipated obligations	[illegible]

FY 1987 Request

Anticipated unobligated balance brought forward	[illegible]
Plus: increases proposed by activity:	
1. Construction	[illegible]
2. Access	[illegible]
Total increase proposed	[illegible]
Total anticipated budget authority available for obligation	[illegible]

BUREAU OF LAND MANAGEMENT

Analysis of Budgetary Resources by Activity

Account: Construction and Access (14-1110-0-1-301)	FY 1985 Appropriation	FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Estimate	FY 1987 Inc.(+)/Dec.(-) from 1986	FY 1987 Inc(+)/Dec(-) from 1986 Adj. App.
1. Construction						
BA available for obligation:						
Appropriation	825	---	---	---	---	---
Unoblig. bal. brt. fwd.	1,982	1,233	1,233	316	-917	-917
Total BA available. . .	2,807	1,233	1,233	316	-917	-917
Less obligations.	-1,574	-917	-917	---	+917	+917
Unoblig. balance brt. fwd..	1,233	316	316	316	---	---
(FTE-T)	(---)	(---)		(---)	(---)	(---)
2. Access						
BA available for obligation:						
Appropriation	1,203	1,395	1,335	1,200	-195	-135
Unoblig. bal. brt. fwd. . .	55	195	195	230	+35	+35
Total BA available . .	1,258	1,590	1,530	1,403	-160	-100
Less obligations	-1,063	-1,359	-1,300	-1,225	+125	+75
Unoblig. balance brt. fwd	195	240	230	205	-35	-25
(FTE-T)	(25)	(25)		(25)	(---)	
Account Total						
BA available for obligation:						
Appropriation	2,028	1,395	1,335	1,200	-195	-135
Unoblig. balance brt. fwd.	2,037	1,428	1,428	546	-882	-882
Total BA available . .	4,065	3,822	2,763	1,746	-1,077	-1,017
Less obligations.	-2,637	-2,267	-2,217	-1,225	+1,042	+992
Unoblig. balance brt. fwd.	1,428	556	546	521	-35	-25
(FTE-T)	(25)	(25)		(25)	(---)	

OVERVIEW OF CONSTRUCTION PROGRAM

BUREAU OF LAND MANAGEMENT

No new construction projects are being proposed for BLM in 1987. The need for restraint in the Federal budget has caused BLM to defer all new construction activity. Emphasis is being directed toward maintenance of the existing capital investments.

Building Construction - Fairbanks, Alaska

In 1986, the construction of the 14,500 square foot BLM fire warehouse will be completed at Fairbanks, Alaska, from funds appropriated to BLM in 1984.

Also, the Bureau is completing the survey and design of a new BLM District Office complex in Fairbanks, Alaska, from funds appropriated in 1985. Additionally, in 1986, the Bureau plans to obligate about $6.8 million for construction of the new District Office complex at Fairbanks. The funds for construction were provided to the Department of the Army in the 1986 Defense Appropriations Act and are being transferred to BLM. A new district complex is needed because the Army plans to reactivate parts of the facilities at Ft. Wainwright, Alaska, which include buildings now being used by BLM under lease from the Army to house a part of the Fairbanks District Office staff.

Justification of Program and Performance

Appropriation: Construction and Access
Activity: Access

(Dollar amounts in thousands)

	1985 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	1,395	1,335	1,395	1,200	-195
(FTE-T)	(25)		(25)	(25)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 BA Cancellation	1986 Adjusted Approp.
Access	1,395	-60	1,335

As a result of the $60,000 PL 99-177 budget authority cancellation, the purchase of 6 easements will be deferred into subsequent fiscal years.

Authorization

43 U.S.C. 1701, 1715, 1762 P.L. 94-579	The Federal Land Policy and Management Act of 1976 authorizes the Secretary of the Interior to manage public lands on a multiple use basis and to acquire by purchase, exchange, donation or eminent domain, access to public lands as necessary to manage those lands or interest in lands.
P.L. 84-171	The Timber Access Road Act of July 26, 1955, authorizes acquiring access to timber roads.
40 U.S.C. 257	The Act of August 1, 1888, as amended, provides condemnation authority.

Objective

The objective of the access program is to:

- Open Federal lands for public access and planned BLM resource management programs as necessary by acquiring legal rights (easements for road and trail access) across non-Federal land.

Base program

Funding for the access program at the 1987 Base level is $1,395,000 and 25 FTE.

Because of the checkerboard land ownership patterns in many parts of the West, Federal lands are often inaccessible for multiple-use or specific resource management activities because of a lack of easements to cross intervening properties. Areas or parcels that are "landlocked" by private or non-Federal government ownerships cannot be properly managed or are managed solely (and often erratically) through the forbearance of the surrounding landowners.

In some cases, it is necessary for BLM to acquire legal access to public lands through the surrounding non-Federally owned lands in order for the general public to use and the Bureau to manage the mineral, energy, timber, recreation, wildlife, and rangeland resources of these public lands.

In addition to the need for new physical access routes, there are also literally hundreds of private roads across non-Federally owned lands that provide physical access to public land resources but which the Bureau has no legal right to use.

Use of these roads to provide access to Federal lands has been at the forbearance of the road owners through informal permission or "gentlemen's agreements" with the Bureau. Since such access can be denied at any time by the landowners, particularly to private citizens seeking to use these public lands, road use must be legalized to ensure unrestricted physical access to the Federal land and resources. Recent access denials such as have occurred in Colorado and Wyoming indicate the need to provide the public legal access to the public lands. Requests for access to public lands presently unavailable for public use total more than 500 annually.

There are an estimated 25 million acres of public lands in the 11 Western States which lack legal access, and more than 8,800 easements may ultimately be needed to manage those lands and use their resources. The Bureau estimates that 500 million board feet of timber as well as other resources are tied up by unresolved access problems. Development or improvement of the public land resources is not feasible until access has been obtained.

To obtain legal access, the Bureau must locate the existing or proposed road by survey, develop a legal description, conduct a title search, appraise values, and negotiate with the landowner for an easement or other acquisition of the rights involved. This is especially important if heavy use of the road for commercial purposes, such as timber hauling, is involved. However, it is also important in providing public access to these lands for hunting, fishing, or other noncommercial uses.

About 42 percent of these will be for multiple use purposes; 53 percent will provide access to timber; and 5 percent will support recreation. At the Base level, 150 easements will be acquired.

Decrease from 1987 Base

(dollars in thousands)

	1987 Base	1987 Estimate	Difference
$	1,395	1,200	-195
(FTE-T)	(25)	(25)	(---)

The $195,000 decrease is proposed since work for planning construction and access needs in the Steese National Conservation Area and White Mountains National Recreation Area in Alaska will have been completed with funds provided in 1986.

Access and construction planning in these areas is expected to be completed in 1986. After management review of the plans, access needs will be weighed against the Bureau's other competing access priorities; and, if deemed appropriate and necessary, funding for any access acquisition or construction would be requested in future years.

Planned workload accomplishments at the 1987 Estimate level compared to 1985 Actual and Estimates for 1986 and 1987 Base are as follows:

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
Easements acquired	126	150	150	150

Distribution of change by object class

The object class detail for the proposed decrease of $195,000 is as follows:

	Amount
Travel and transportation of persons	$10,000
Communications, utilities, and miscellaneous charges	10,000
Printing and reproduction	20,000
Other services	145,000
Supplies and materials	10,000
Total	$195,000

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300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CONSTRUCTION AND ACCESS
Program and Financing (in thousands of dollars)

Identification code 14-1110-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
Direct program:			
00.01 Construction....................	1,564	1,243	---
00.02 Access..........................	1,063	1,395	1,200
10.00 Total obligations............	2,627	2,638	1,200
Financing:			
21.40 Unobligated balance available, start of year..................	-2,037	-1,438	-195
24.40 Unobligated balance available, end of year....................	1,438	195	195
39.00 Budget authority.............	2,028	1,395	1,200
Budget authority:			
40.00 Appropriation....................	2,028	1,403	1,200
40.00 Reduction pursuant to P.L. 99-190	---	-8	---
43.00 Appropriation (adjusted).....	2,028	1,395	1,200
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	2,627	2,638	1,200
72.40 Obligated balance, start of year.	1,233	1,708	1,708
74.40 Obligated balance, end of year...	-1,708	-1708	-1,708
90.00 Outlays..........................	2,152	2,638	1,200
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300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CONSTRUCTION AND ACCESS
Object Classification (in thousands of dollars)

Identification code 14-1110-0-1-302		19 85 actual	19 86 estimate	19 87 estimate
	Personnel compensation:			
11.1	Full-time permanent	754	750	750
11.3	Other than full-time permanent	17	15	15
11.5	Other personnel compensation	4	5	5
11.8	Special personal services payments	2	---	---
11.9	Total personnel compensation	777	770	770
12.1	Personnel benefits: Civilian	101	100	100
21.0	Travel and transportation of persons	36	35	30
22.0	Transportation of things	24	25	20
23.3	Communications, utilities, and miscellaneous charges	26	25	20
24.0	Printing and reproduction	7	10	---
25.0	Other services	12	10	10
26.0	Supplies and materials	88	90	30
31.0	Equipment	12	10	---
32.0	Lands and structures	1,544	1,563	220
99.9	Total obligations	2,627	2,638	1,200
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300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CONSTRUCTION AND ACCESS
Personnel Summary

Identification code 14-1110-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	22	22	22
Total compensable workyears: Full-time equivalent employment	25	25	25
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CONSTRUCTION AND ACCESS
(P.L. 99-177 Sequestration)
Program and Financing (in thousands of dollars)

Identification code 14-1110-6-1-302	19 85 actual	19 86 estimate	19 37 estimate
10.00 Total obligations............	---	-60	---
40.00 Budget authority.............	---	-60	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	---	-60	---
72.40 Obligated balance, start of year.	---	---	-43
74.40 Obligated balance, end of year...	---	43	---
90.00 Outlays......................	---	-17	-43
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Appropriation Summary Statement

Appropriation: Land Acquisition

The Land Acquisition appropriation provides funding for acquisition of lands or waters, or interests therein, essential to improving the manageability of the public lands and to purchase or make equalization payments for land exchanges in response to specific Acts of Congress, such as the Navajo-Hopi Resettlement Act of 1980.

No new land acquisition projects or requests for new funding are included in the 1987 Budget. A rescission is proposed of the unobligated balance of funds appropriated in FY 1984 for the Navajo-Hopi Resettlement Act. All exchanges for the Navajo-Hopi program have been completed, and associated administrative expenses will be ending in 1986. The unobligated funds remaining in 1986 are no longer needed for the purposes for which they were originally appropriated and, consequently, are recommended for rescission.

Appropriation Language Sheet

[Land Acquisition]

[For expenses necessary to carry out the provisions of sections 205, 206 and 318(d) of Public Law 94-579 including administrative expense and acquisition of lands or waters, or interest therein, $2,300,000, to be derived from the Land and Water Conservation Fund, to remain available until expended.]

(16 U.S.C. 460y, 4601; 43 U.S.C. 1715; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Appropriation Language Citations

Bureau of Land Management

Appropriation: Land Acquisition

1. No appropriation is requested for FY 1987.

16 U.S.C. 460y
16 U.S.C. 4601
43 U.S.C. 1715
P.L. 99-190

16 U.S.C. 460y provides authorization to acquire lands or interests in lands, within the area and proximate lands of the King Range National Conservation Area.

16 U.S.C. 4601 provides that funds received by the Secretary as "exchange equalization payments" be deposited in the Treasury and are authorized to be appropriated for acquisitions in the King Range NCA and are to remain available until appropriated.

43 U.S.C. 1715 provides authority for the acquisition of lands or interests in lands where it is consistent with the mission of the Department and with land use plans, by purchase, exchange, donation, or eminent domain.

Public Law 99-190, the FY 1986 Appropriations Act for the Department of the Interior and Related Agencies, provides funding for programs in FY 1986.

Budgetary Resources for Land Acquisition

BUREAU OF LAND MANAGEMENT

Account: Land Acquisition (14X5033)

FY 1986 Budgetary Status

Budget authority available:

Appropriation realized	2,286,000
PL 99-177 B.A. Cancellation	-98,000
Prior-year unobligated balance brought forward	4,716,000
Rescission Proposed	-3,000,000
Total BA available for obligation	3,904,000

Less anticipated obligations (by activity):

1. Acquisition management	285,000
2. Acquisitions	3,404,000
Total anticipated obligations	-3,689,000

FY 1987 Request

Anticipated unobligated balance brought forward	215,000

Plus increases proposed (by activity):

1. Acquisition management	---
2. Acquisitions (L&WCF)	---
Total increase proposed	---
Total anticipated BA available for obligation	215,000

(i) Mineral Leasing Act for Acquired Lands of 1947 (Section 6), (61 Stat. 915, 30 U.S.C. 355);

(j) Material Disposal Act of 1947 (Section 3), (61 Stat. 681, 30 U.S.C. 603); and

(k) Refuge Revenue Sharing Act of 1978 (92 Stat. 1321, 16 U.S.C. 715s(c)(2)).

The amounts to be deducted are reported to the Bureau of Land Management each year by the Governor of each State or his delegate; or

(2) Ten cents for each acre of "entitlement land" within the unit of government. Under this alternative, no deductions are made for the other Federal land payments received by the unit of government in the preceding fiscal year.

Both alternatives are subject to a ceiling based on the population within the unit of government. The ceiling is based on a sliding scale, starting at $50 per capita (for population of up to 5,000) and rising to a maximum of $1,000,000. Under Alternative (1), if the total calculated payment (75 cents per entitlement acre) exceeds the ceiling, reductions for other Federal land payments received are made from the ceiling, not from the 75 cents per acre figure.

Section 3 Payments

Section 3 of the Act authorizes payments for any lands or interests therein which were acquired after December 31, 1970, as additions to the National Park System or National Forest Wilderness Areas. These lands must have been subject to local real property taxes within the five-year period preceding the acquisition by the Federal Government. Payments under this section are made in addition to payments under section 1. They are based on 1 percent of the fair market value of the lands at the time of acquisition, but may not exceed the amount of real property taxes assessed and levied on the property during the last full fiscal year before the fiscal year in which acquired. Section 3 payments for each acquisition are to be made annually for five years following each acquisition.

In the case of lands acquired for additions to the Redwoods National Park by authority of the Redwoods National Park Expansion Act, section 3 payments will continue beyond the five-year limitation. These payments will continue until the total amount paid equals five times the property taxes assessed and levied on the property during the last full fiscal year before the fiscal year in which the property was acquired by the Federal Government.

Federal payments of $100 or more made under section 3 must be distributed by the recipient unit of local government to those units of local government and affected school districts which have incurred losses of real property taxes due to the acquisition of these lands or interests therein. Distribution shall be in proportion to the tax revenues assessed and levied by the affected units of local governments and school districts in the year prior to the acquisition of these lands by the Federal Government.

Administrative Expenses

Up to $400,000 of the appropriation may be used for administrative expenses of implementing the Act, such as coordination with other Federal land-managing agencies, communications with State governors' offices and counties which receive payments, and costs of ADP services in computing alternative payment calculations and the final disbursement schedule sent to Treasury. The appropriation is also available to correct underpayments in the previous fiscal year to achieve equity among all qualified recipients.

Increase from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	104,370	105,000	+630
(FTE-T)	(1)	(1)	(---)

The proposed increase of $630,000 will provide full funding of the estimated 1987 payments under the existing statutory formulas, given that there is no substantial change in the distribution of the offsetting revenue sharing payments which must be considered in making calculations under section 1 of the Act.

Distribution of change by object class

The object class detail for the proposed increase is as follows:

	Amount
Grants, subsidies, and contributions	$630,000

BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
SUMMARY OF PAYMENTS BY STATE

STATE	FISCAL YEAR 1985 PAYMENT
ALABAMA	$ 112,669
ALASKA	5,277,437
ARIZONA	8,475,471
ARKANSAS	1,094,916
CALIFORNIA	9,944,401
COLORADO	7,000,420
CONNECTICUT	19,871
DELAWARE	4,495
DISTRICT OF COLUMBIA	6,010
FLORIDA	1,244,111
GEORGIA	713,228
GUAM	1,267
HAWAII	8,413
IDAHO	7,320,888
ILLINOIS	274,979
INDIANA	143,540
IOWA	122,532
KANSAS	344,711
KENTUCKY	683,587
LOUISIANA	211,914
MAINE	50,959
MARYLAND	48,979
MASSACHUSETTS	76,511
MICHIGAN	1,277,249
MINNESOTA	889,120
MISSISSIPPI	393,536
MISSOURI	1,100,405
MONTANA	8,356,506
NEBRASKA	315,993
NEVADA	5,654,266
NEW HAMPSHIRE	313,380
NEW JERSEY	45,070
NEW MEXICO	10,332,972
NEW YORK	169,367
NORTH CAROLINA	1,225,948
NORTH DAKOTA	515,092
OHIO	277,176
OKLAHOMA	759,697
OREGON	2,617,177
PENNSYLVANIA	204,239
PUERTO RICO	9,183
SOUTH CAROLINA	122,833
SOUTH DAKOTA	1,542,405
TENNESSEE	456,258
TEXAS	1,591,378
UTAH	8,851,890
VERMONT	216,090
VIRGIN ISLANDS	84,389

STATE	FISCAL YEAR 1985 PAYMENT
VIRGINIA	$ 1,136,126
WASHINGTON	1,838,476
WEST VIRGINIA	808,741
WISCONSIN	1,092,708
WYOMING	7,606,375
TOTALS	$102,987,375

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation:	Payments in Lieu of Taxes	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
		FTE	Amount	FTE	Amount	FTE	Amount
Object Class							
11	Personnel Compensation:						
11.1	Full-time permanent	1	54	1	54	---	---
	Other Objects						
12.1	Personnel benefits		6		6		---
25.0	Other services		21		21		---
26.0	Supplies and materials		1		1		---
31.0	Equipment		19		19		---
41.0	Grants, subsidies, and contributions		104,269		104,899		+630
	Total requirements		104,370		105,000		+630

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
Program and Financing (in thousands of dollars)

Identification code 14-1114-0-1-852	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
10.00 Total obligations...........	102,507	104,370	105,000
Financing:			
25.00 Unobligated balance lapsing......	393	---	---
39.00 Budget authority............	102,900	104,370	105,000
Budget authority:			
40.00 Appropriation...................	102,900	105,000	105,000
40.00 Reduction pursuant to P.L. 99-190	---	-630	---
43.00 Appropriation (adjusted).....	102,900	104,370	105,000
Relation of obligations to outlays:			
71.00 Obligations incurred, net.......	102,507	104,370	105,000
72.40 Obligated balance, start of year.	545	3	---
74.40 Obligated balance, end of year..	-3	---	---
77.00 Adjustments in expired accounts.	228	---	---
90.00 Outlays.....................	103,277	104,373	105,000
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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
Object Classification (in thousands of dollars)

Identification code 14-1114-0-1-852	19 85 actual	19 86 estimate	19 87 estimate
11.1 Personnel compensation: Full-time permanent	40	40	40
12.1 Personnel benefits: Civilian	4	4	4
25.0 Other services	73	50	50
26.0 Supplies and materials	1	1	1
41.0 Grants, subsidies, and contributions	102,389	104,275	104,905
99.9 Total obligations	102,507	104,370	105,000
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July 1964, Bureau of the Budget
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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
Personnel Summary

Identification code 14-1114-0-1-852	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	1	1	1
Total compensable workyears: Full-time equivalent employment	1	1	1
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306
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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
(P.L. 99-177 Sequestration)
Program and Financing (in thousands of dollars)

Identification code 14-1114-6-1-852	19 85 actual	19 86 estimate	19 87 estimate
10.00 Total obligations............	---	-4,488	---
40.00 Budget authority............	---	-4,488	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	---	-4,488	---
90.00 Outlays......................	---	-4,488	---
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Appropriation Summary Statement

Appropriation: Oregon and California Grant Lands

The Oregon and California (O&C) Grant Lands appropriation provides for the management of the revested Oregon and California Railroad Grant Lands and the reconveyed Coos Bay Wagon Road Lands for permanent forest production under the principle of sustained yield as mandated by the O&C Act of 1937 (43 U.S.C. 1181). The goals of the management program are to provide a permanent supply of timber, protect watersheds, provide recreational facilities, and contribute to the economic stability of local communities dependent upon the timber resource.

Approximately 10 percent (or 240,000 acres) of the BLM-managed forest lands in western Oregon are public domain (PD) lands intermingled with the revested Oregon and California (O&C) Grant Lands and Coos Bay Wagon Road (CBWR) lands. Although these intermingled public domain lands are managed under FLPMA, the actual management practices are generally the same as those implemented for the O&C and CBWR lands. Funding for these PD lands in western Oregon is included in the Oregon and California Grant Lands appropriation.

The current management prescriptions for all of the lands in western Oregon are the result of the management plans which considered all reasonable multiple use mixes and analyzed their environmental impacts. From this effort, the preferred alternative was selected by managers and documented in the records of decisions. The program accomplishments associated with the PD, O&C and CBWR lands are all displayed in this appropriation.

Programs conducted on certain O&C lands (490,000 acres) included within National Forests and managed by the Forest Service under applicable National Forest System legislative authorities are funded within the Forest Service budget, not through this account.

The major activities financed by this appropriation are BLM programs which provide the following:

Construction and Acquisition ($528,000)

Provides for the acquisition of timber sale road easements, road use agreements for timber access and resource management roads, signing, transportation planning, survey and design of timber access roads, and rock aggregate used in the construction of timber access roads.

Maintenance: ($3,620,000)

Provides for maintenance of office buildings, warehouse and storage structures, shops, greenhouses, recreation sites, and for a transportation system necessary for the marketing of timber from the timber lands in western Oregon.

Renewable Resources Management: ($46,617,000)

Provides for the marketing of 1.183 billion board feet of timber and the timber development practices necessary to maintain this level of annual harvest. In addition, fire protection is provided for some 2.4 million acres of forest land. Other resource programs including range management; soil, water and air management; wildlife habitat management; and recreation management are funded in this activity.

Planning and Data Management ($395,000)

Provides for the maintenance of land use plans and for the automated data processing support required for conducting annual timber sales as well as other ADP requirements.

Background of the O&C Appropriation

The Oregon and California Grant Lands Act of 1937 (50 Stat. 876, Title II) provides that revenues from the Oregon and California (O&C) Grant Lands be distributed according to the following formula:

1. Fifty percent to the 18 O&C counties in western Oregon (subsection (a) of Title II of the O&C Act);

2. An additional 25 percent to the 18 O&C counties after delinquent tax claims were paid and after the United States Treasury was reimbursed for money advanced to make payments in lieu of taxes prior to 1937; (provided in the second paragraph of subsection (b) of Title II of the O&C Act); and

3. Twenty-five percent to the General Fund of the Treasury to be made available upon appropriation by Congress to administer the O&C lands (provided in subsection (c) of Title II of the O&C Act).

Since 1939, amounts have been appropriated to the Interior Department for administration of the O&C lands, out of the 25 percent share paid to Treasury under subsection (c) of the O&C Act.

By 1951, the Treasury had been repaid in full for money advanced to make the payments in lieu of taxes, and according to subsection (b), Title II of the O&C Act, the 18 O&C counties were entitled to 75 percent of the receipts. However, in 1953 the counties offered to return one-third of their share (or 25 percent of total receipts) to the United States for the development and management of the O&C lands. This is the portion referred to as the subsection (b) share cited in item 2 above.

Since 1953, Congress has appropriated some or all of these subsection (b) receipts for development, protection and management of the O&C lands. From 1961 through 1981 an amount equal to the full 25 percent of receipts collected was appropriated by Congress for management and development of O&C lands under the "Oregon and California Grant Lands" appropriation.

In 1982, for the first time, Congress made a direct, definite appropriation for managing the O&C lands to eliminate the uncertainty occuring under the receipt limitation appropriation which was caused by fluctuating receipts from timber sales. Under the direct appropriation approach, 25 percent of the total receipts formerly appropriated for management of the O&C lands (subsection (b) receipts) are transferred to the General Fund in the Treasury as reimbursement for all or part of the direct "O&C appropriation". Beginning with 1985, the Forest Service received a direct appropriation for its activities on O&C designated lands within the boundaries of National Forests, rather than an allocation from BLM. BLM's 1987 O&C appropriation request is a continuation of these concepts.

Receipts

Receipts from the harvest of timber and other products on the Oregon and California Grant Lands, the Coos Bay Wagon Road Lands (CBWR) and intermingled public domain lands (P.D.) of western Oregon are a significant source of revenue to both the U.S. Treasury and the 18 O&C counties.

Actual receipts for 1985 and estimates for 1986, and 1987 are as follows:

Receipts from BLM Managed Lands in Western Oregon

(Dollar amounts in thousands)

Source	1985 Actual	1986 Estimate	1987 Estimate
O&C	$122,247	$130,200	$154,400
CBWR	5,534	6,700	8,000
P.D.	6,174	10,500	12,500
Total	$133,955	$147,400	$174,900

Through 1986 receipts from O&C lands are divided between the U.S. Treasury and the O&C counties on a 50-50 basis. Counties are paid in the year following collection of receipts. In 1987 the Administration is proposing to share O&C receipts with the counties on a net basis. Under this initiative, receipts which are currently shared on a gross basis will be shared net of Federal costs directly related to the generation of these revenues. Receipts from CBWR lands are used to pay taxes imposed on these lands to Coos Bay and Douglas counties, the remainder is returned to the Treasury. Receipts from P.D. lands are divided between the State, General Treasury and the Reclamation fund.

The following is an approximation of the distribution of these receipts:

($000)

	1986	1987	1988
State/Counties	$61,950 1/	$41,100	$53,280
Treasury	67,313	98,320	112,120
Reclamation Fund	4,692	7,980	9,500

1/ Includes $50,952,550 of receipts scheduled to be paid to the O&C counties in fiscal 1986, but actually paid in late September 1985 (Fiscal Year 1985). Receipts actually paid in FY 1986 were $10,170,978.

Appropriation Language Sheet

Oregon and California Grant Lands

For expenses necessary for management, protection, and development of resources and for construction, operation, and maintenance of access roads, reforestation, and other improvements on the revested Oregon and California Railroad grant lands, on other Federal lands in the Oregon and California land-grant counties of Oregon, and on adjacent rights-of-ways; and acquisition of lands or interests therein including existing connecting roads on or adjacent to such grant lands; [$55,777,000] $51,160,000, to remain available until expended: Provided, That the amount appropriated herein for road construction shall be transferred to the Federal Highway Administration, Department of Transportation: Provided further, That 25 per centum of the aggregate of all receipts during the current fiscal year from the revested Oregon and California Railroad grant lands is hereby made a charge against the Oregon and California land grant funds and shall be transferred to the General Fund in the Treasury in accordance with the provisions of the second paragraph of subsection (b) of title II of the Act of August 28, 1937 (50 Stat. 876).

(16 U.S.C. 594; 43 U.S.C. 1181, 1701; 53 Stat. 753; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in P.L. 99-190.)

Appropriation Language Citations

Bureau of Land Management

Appropriation: Oregon and California Grant Lands

1. For expenses necessary for management, protection and development of resources and for construction, operation, and maintenance of access roads, reforestation, and other improvements on the revested Oregon and California Railroad grant lands, on other Federal lands in the Oregon and California land-grant counties of Oregon, and on adjacent rights-of-way; and acquisition of lands or interests therein including existing connecting roads on or adjacent to such grant lands; [$55,777,000] $51,160,000, to remain available until expended:

43 U.S.C. 1181
P.L. 75-405

The Oregon and California Grant Land Act of August 28, 1937 (43 U.S.C. 1181) provides for conservation, management, permanent forest production, and sale of timber from the Revested Oregon and California Railroad Grant Lands and Coos Bay wagon Road Lands.

53 Stat. 753

The Act of May 24, 1939 relates to the disposition of funds from the Coos Bay Wagon Road Grant Lands located in western Oregon.

16 U.S.C. 594
P.L. 67-315

The Timber Protection Act of 1922 provides for the protection of timber from fire, disease, and insects.

43 U.S.C. 1701 *et seq.*
P.L. 94-579

The Federal Land Policy and Management Act of 1976 applies to all public lands which include the O&C grant lands by definition (43 U.S.C. 1701). However, Section 701(b) provides that in the event that any provision of FLPMA is in conflict with or inconsistent with the O&C Act and Coos Bay Wagon Road Act, insofar as they relate to management of timber resources and disposition of revenue from lands and resources, the latter Acts will prevail.

Department of the Interior and Related Agencies Appropriations Act 1986, as included in Public Law 99-190.

The "O&C Grant Lands" appropriation was first provided in the FY 1961 Interior Appropriations Act as a "no-year" appropriation of 25 percent of receipts generated from the O&C lands. The appropriation was changed to a definite amount in the FY 1982 Appropriations Act.

2. Provided, That the amount appropriated herein for road construction shall be transferred to the Federal Highway Administration, Department of Transportion:

(i) Mineral Leasing Act for Acquired Lands of 1947 (Section 6), (61 Stat. 915, 30 U.S.C. 355);

(j) Material Disposal Act of 1947 (Section 3), (61 Stat. 681, 30 U.S.C. 603); and

(k) Refuge Revenue Sharing Act of 1978 (92 Stat. 1321, 16 U.S.C. 715s(c)(2)).

The amounts to be deducted are reported to the Bureau of Land Management each year by the Governor of each State or his delegate; or

(2) Ten cents for each acre of "entitlement land" within the unit of government. Under this alternative, no deductions are made for the other Federal land payments received by the unit of government in the preceding fiscal year.

Both alternatives are subject to a ceiling based on the population within the unit of government. The ceiling is based on a sliding scale, starting at $50 per capita (for population of up to 5,000) and rising to a maximum of $1,000,000. Under Alternative (1), if the total calculated payment (75 cents per entitlement acre) exceeds the ceiling, reductions for other Federal land payments received are made from the ceiling, not from the 75 cents per acre figure.

Section 3 Payments

Section 3 of the Act authorizes payments for any lands or interests therein which were acquired after December 31, 1970, as additions to the National Park System or National Forest Wilderness Areas. These lands must have been subject to local real property taxes within the five-year period preceding the acquisition by the Federal Government. Payments under this section are made in addition to payments under section 1. They are based on 1 percent of the fair market value of the lands at the time of acquisition, but may not exceed the amount of real property taxes assessed and levied on the property during the last full fiscal year before the fiscal year in which acquired. Section 3 payments for each acquisition are to be made annually for five years following each acquisition.

In the case of lands acquired for additions to the Redwoods National Park by authority of the Redwoods National Park Expansion Act, section 3 payments will continue beyond the five-year limitation. These payments will continue until the total amount paid equals five times the property taxes assessed and levied on the property during the last full fiscal year before the fiscal year in which the property was acquired by the Federal Government.

Federal payments of $100 or more made under section 3 must be distributed by the recipient unit of local government to those units of local government and affected school districts which have incurred losses of real property taxes due to the acquisition of these lands or interests therein. Distribution shall be in proportion to the tax revenues assessed and levied by the affected units of local governments and school districts in the year prior to the acquisition of these lands by the Federal Government.

Administrative Expenses

Up to $400,000 of the appropriation may be used for administrative expenses of implementing the Act, such as coordination with other Federal land-managing agencies, communications with State governors' offices and counties which receive payments, and costs of ADP services in computing alternative payment calculations and the final disbursement schedule sent to Treasury. The appropriation is also available to correct underpayments in the previous fiscal year to achieve equity among all qualified recipients.

Increase from 1987 Base

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	104,370	105,000	+630
(FTE-T)	(1)	(1)	(---)

The proposed increase of $630,000 will provide full funding of the estimated 1987 payments under the existing statutory formulas, given that there is no substantial change in the distribution of the offsetting revenue sharing payments which must be considered in making calculations under section 1 of the Act.

Distribution of change by object class

The object class detail for the proposed increase is as follows:

	Amount
Grants, subsidies, and contributions	$630,000

BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
SUMMARY OF PAYMENTS BY STATE

STATE	FISCAL YEAR 1985 PAYMENT
ALABAMA	$ 112,669
ALASKA	5,277,437
ARIZONA	8,475,471
ARKANSAS	1,094,916
CALIFORNIA	9,944,401
COLORADO	7,000,420
CONNECTICUT	19,871
DELAWARE	4,495
DISTRICT OF COLUMBIA	6,010
FLORIDA	1,244,111
GEORGIA	713,228
GUAM	1,267
HAWAII	8,413
IDAHO	7,320,888
ILLINOIS	274,979
INDIANA	143,540
IOWA	122,532
KANSAS	344,711
KENTUCKY	683,587
LOUISIANA	211,914
MAINE	50,959
MARYLAND	48,979
MASSACHUSETTS	76,511
MICHIGAN	1,277,249
MINNESOTA	889,120
MISSISSIPPI	393,536
MISSOURI	1,100,405
MONTANA	8,356,506
NEBRASKA	315,993
NEVADA	5,654,266
NEW HAMPSHIRE	313,380
NEW JERSEY	45,070
NEW MEXICO	10,332,972
NEW YORK	169,367
NORTH CAROLINA	1,225,948
NORTH DAKOTA	515,092
OHIO	277,176
OKLAHOMA	759,697
OREGON	2,617,177
PENNSYLVANIA	204,239
PUERTO RICO	9,183
SOUTH CAROLINA	122,833
SOUTH DAKOTA	1,542,405
TENNESSEE	456,258
TEXAS	1,591,378
UTAH	8,851,890
VERMONT	216,090
VIRGIN ISLANDS	84,389

STATE	FISCAL YEAR 1985 PAYMENT
VIRGINIA	$ 1,136,126
WASHINGTON	1,838,476
WEST VIRGINIA	808,741
WISCONSIN	1,092,708
WYOMING	7,606,375
TOTALS	$102,987,375

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation:	Payments in Lieu of Taxes	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
		FTE	Amount	FTE	Amount	FTE	Amount
Object Class							
11	Personnel Compensation:						
11.1	Full-time permanent	1	54	1	54	---	---
	Other Objects						
12.1	Personnel benefits		6		6		---
25.0	Other services		21		21		---
26.0	Supplies and materials		1		1		---
31.0	Equipment		19		19		---
41.0	Grants, subsidies, and contributions		104,269		104,899		+630
	Total requirements		104,370		105,000		+630

Type size:
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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
Program and Financing (in thousands of dollars)

Identification code 14-1114-0-1-852	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
10.00 Total obligations...........	102,507	104,370	105,000
Financing:			
25.00 Unobligated balance lapsing......	393	---	---
39.00 Budget authority............	102,900	104,370	105,000
Budget authority:			
40.00 Appropriation..................	102,900	105,000	105,000
40.00 Reduction pursuant to P.L. 99-190	---	-630	---
43.00 Appropriation (adjusted).....	102,900	104,370	105,000
Relation of obligations to outlays:			
71.00 Obligations incurred, net.......	102,507	104,370	105,000
72.40 Obligated balance, start of year.	545	3	---
74.40 Obligated balance, end of year..	-3	---	---
77.00 Adjustments in expired accounts.	228	---	---
90.00 Outlays.....................	103,277	104,373	105,000
(Mono cast: 21.5)	(Mono cast: 5)	(Mono cast: 5)	(Mono cast: 4.9)

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
Object Classification (in thousands of dollars)

Identification code 14-1114-0-1-852	1985 actual	1986 estimate	1987 estimate
11.1 Personnel compensation: Full-time permanent	40	40	40
12.1 Personnel benefits: Civilian	4	4	4
25.0 Other services	73	50	50
26.0 Supplies and materials	1	1	1
41.0 Grants, subsidies, and contributions	102,389	104,275	104,905
99.9 Total obligations	102,507	104,370	105,000

(Mono cast: 21.5) (Mono cast: 8) (Mono cast: 5) (Mono cast: 4.9)

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Case 230

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
Personnel Summary

Identification code 14-1114-0-1-852	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	1	1	1
Total compensable workyears: Full-time equivalent employment	1	1	1
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306
(Memo cast: 21.5)	(Memo cast: 8)	(Memo cast: 5)	(Memo cast: 4.5)

Type size:
8 point 22 picas
Case 180
Red underscore
Case 218

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
PAYMENTS IN LIEU OF TAXES
(P.L. 99-177 Sequestration)
Program and Financing (in thousands of dollars)

Identification code 14-1114-6-1-852	19 85 actual	19 86 estimate	19 87 estimate
10.00 Total obligations............	---	-4,488	---
40.00 Budget authority............	---	-4,488	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	---	-4,488	---
90.00 Outlays......................	---	-4,488	---
(Mono cost: 21.5)	(Mono cost: 5)	(Mono cost: 5)	(Mono cost: 4.9)

Appropriation Summary Statement

Appropriation: Oregon and California Grant Lands

The Oregon and California (O&C) Grant Lands appropriation provides for the management of the revested Oregon and California Railroad Grant Lands and the reconveyed Coos Bay Wagon Road Lands for permanent forest production under the principle of sustained yield as mandated by the O&C Act of 1937 (43 U.S.C. 1181). The goals of the management program are to provide a permanent supply of timber, protect watersheds, provide recreational facilities, and contribute to the economic stability of local communities dependent upon the timber resource.

Approximately 10 percent (or 240,000 acres) of the BLM-managed forest lands in western Oregon are public domain (PD) lands intermingled with the revested Oregon and California (O&C) Grant Lands and Coos Bay Wagon Road (CBWR) lands. Although these intermingled public domain lands are managed under FLPMA, the actual management practices are generally the same as those implemented for the O&C and CBWR lands. Funding for these PD lands in western Oregon is included in the Oregon and California Grant Lands appropriation.

The current management prescriptions for all of the lands in western Oregon are the result of the management plans which considered all reasonable multiple use mixes and analyzed their environmental impacts. From this effort, the preferred alternative was selected by managers and documented in the records of decisions. The program accomplishments associated with the PD, O&C and CBWR lands are all displayed in this appropriation.

Programs conducted on certain O&C lands (490,000 acres) included within National Forests and managed by the Forest Service under applicable National Forest System legislative authorities are funded within the Forest Service budget, not through this account.

The major activities financed by this appropriation are BLM programs which provide the following:

Construction and Acquisition ($528,000)

Provides for the acquisition of timber sale road easements, road use agreements for timber access and resource management roads, signing, transportation planning, survey and design of timber access roads, and rock aggregate used in the construction of timber access roads.

Maintenance: ($3,620,000)

Provides for maintenance of office buildings, warehouse and storage structures, shops, greenhouses, recreation sites, and for a transportation system necessary for the marketing of timber from the timber lands in western Oregon.

Renewable Resources Management: ($46,617,000)

Provides for the marketing of 1.183 billion board feet of timber and the timber development practices necessary to maintain this level of annual harvest. In addition, fire protection is provided for some 2.4 million acres of forest land. Other resource programs including range management; soil, water and air management; wildlife habitat management; and recreation management are funded in this activity.

Planning and Data Management ($395,000)

Provides for the maintenance of land use plans and for the automated data processing support required for conducting annual timber sales as well as other ADP requirements.

Background of the O&C Appropriation

The Oregon and California Grant Lands Act of 1937 (50 Stat. 876, Title II) provides that revenues from the Oregon and California (O&C) Grant Lands be distributed according to the following formula:

1. Fifty percent to the 18 O&C counties in western Oregon (subsection (a) of Title II of the O&C Act);

2. An additional 25 percent to the 18 O&C counties after delinquent tax claims were paid and after the United States Treasury was reimbursed for money advanced to make payments in lieu of taxes prior to 1937; (provided in the second paragraph of subsection (b) of Title II of the O&C Act); and

3. Twenty-five percent to the General Fund of the Treasury to be made available upon appropriation by Congress to administer the O&C lands (provided in subsection (c) of Title II of the O&C Act).

Since 1939, amounts have been appropriated to the Interior Department for administration of the O&C lands, out of the 25 percent share paid to Treasury under subsection (c) of the O&C Act.

By 1951, the Treasury had been repaid in full for money advanced to make the payments in lieu of taxes, and according to subsection (b), Title II of the O&C Act, the 18 O&C counties were entitled to 75 percent of the receipts. However, in 1953 the counties offered to return one-third of their share (or 25 percent of total receipts) to the United States for the development and management of the O&C lands. This is the portion referred to as the subsection (b) share cited in item 2 above.

Since 1953, Congress has appropriated some or all of these subsection (b) receipts for development, protection and management of the O&C lands. From 1961 through 1981 an amount equal to the full 25 percent of receipts collected was appropriated by Congress for management and development of O&C lands under the "Oregon and California Grant Lands" appropriation.

In 1982, for the first time, Congress made a direct, definite appropriation for managing the O&C lands to eliminate the uncertainty occuring under the receipt limitation appropriation which was caused by fluctuating receipts from timber sales. Under the direct appropriation approach, 25 percent of the total receipts formerly appropriated for management of the O&C lands (subsection (b) receipts) are transferred to the General Fund in the Treasury as reimbursement for all or part of the direct "O&C appropriation". Beginning with 1985, the Forest Service received a direct appropriation for its activities on O&C designated lands within the boundaries of National Forests, rather than an allocation from BLM. BLM's 1987 O&C appropriation request is a continuation of these concepts.

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Actual receipts for 1985 and estimates for 1986, and 1987 are as follows:

Receipts from BLM Managed Lands in Western Oregon

(Dollar amounts in thousands)

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($000)

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Oregon and California Grant Lands

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(16 U.S.C. 594; 43 U.S.C. 1181, 1701; 53 Stat. 753; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in P.L. 99-190.)

Appropriation Language Citations

Bureau of Land Management

Appropriation: Oregon and California Grant Lands

1. For expenses necessary for management, protection and development of resources and for construction, operation, and maintenance of access roads, reforestation, and other improvements on the revested Oregon and California Railroad grant lands, on other Federal lands in the Oregon and California land-grant counties of Oregon, and on adjacent rights-of-way; and acquisition of lands or interests therein including existing connecting roads on or adjacent to such grant lands; [$55,777,000] *$51,160,000*, to remain available until expended:

43 U.S.C. 1181
P.L. 75-405

The *Oregon and California Grant Land Act of August 28, 1937* (43 U.S.C. 1181) provides for conservation, management, permanent forest production, and sale of timber from the Revested Oregon and California Railroad Grant Lands and Coos Bay Wagon Road Lands.

53 Stat. 753

The *Act of May 24, 1939* relates to the disposition of funds from the Coos Bay Wagon Road Grant Lands located in western Oregon.

16 U.S.C. 594
P.L. 67-315

The *Timber Protection Act of 1922* provides for the protection of timber from fire, disease, and insects.

43 U.S.C. 1701 *et seq.*
P.L. 94-579

The *Federal Land Policy and Management Act of 1976* applies to all public lands which include the O&C grant lands by definition (43 U.S.C. 1701). However, Section 701(b) provides that in the event that any provision of FLPMA is in conflict with or inconsistent with the O&C Act and Coos Bay Wagon Road Act, insofar as they relate to management of timber resources and disposition of revenue from lands and resources, the latter Acts will prevail.

Department of the Interior and Related Agencies Appropriations Act 1986, as included in Public Law 99-190.

The "O&C Grant Lands" appropriation was first provided in the FY 1981 Interior Appropriations Act as a "no-year" appropriation of 25 percent of receipts generated from the O&C lands. The appropriation was changed to a definite amount in the FY 1982 Appropriations Act.

2. *Provided*, That the amount appropriated herein for road construction shall be transferred to the Federal Highway Administration, Department of Transportation:

Funds for access road construction in the O&C were first appropriated as a portion of the BLM "Construction" appropriation in FY 1953. At that time, and at the establishment of the BLM Construction appropriation account in FY 1951, the Appropriations Act provided that funds appropriated for road construction shall be transferred to the Bureau of Public Road which subsequently became the Federal Highway Administration in the Department of Transportation. The language has been carried in all subsequent appropriations for the O&C program.

3. Provided further, That 25 per centum of the aggregate of all receipts during the current fiscal year from the revested Oregon and California Railroad grant lands is hereby made a charge against the Oregon and California land grant fund and shall be transferred to the General Fund in the Treasury in accordance with the provisions of the second paragraph of subsection (b) of Title II of the Act of August 28, 1937 (50 Stat. 876).

This language was first enacted in the FY 1953 Interior Department Appropriations Act when a portion of funds appropriated in the BLM "Construction" account were provided specifically for construction and acquisition projects and made a reimbursable charge against the one-third portion of receipts which were eligible to be returned to the O&C counties under the provision of the second paragraph of subsection (b) of Title II of the O&C Act. This language has been included in all subsequent appropriations.

Summary of Requirements

Appropriation: Oregon and California Grant Lands

(Dollar amounts in thousands)

	FTE-T	Amount	FTE-T	Amount
Appropriation currently available, 1986	---	---	998	55,777
P.L. 99-177 B.A. Cancellation				-2,398
Adjusted Appropriation, 1986			998	53,379
Adjustments to Base:				
Adjustment for 1986 impact of P.L. 99-177.....		+2,398		
Anticipated savings from management initiatives	---	-135		
Total, Adjustments to Base			---	+2,263
1987 Base Budget			998	55,642
Program Changes (Changes to Base budget, detailed below)			-10	-4,482
Total Requirements (1987 Estimate)			988	51,160

SUMMARY OF REQUIREMENTS
(Dollars in thousands)

Comparison by activities/ subactivities	1985 Actual FTE-T	1985 Actual Amount	1986 Enacted to Date FTE-T	1986 Enacted to Date Amount	PL 99-177 Reduction Amount	1986 Adjusted Approp. Amount	1987 Base FTE-T	1987 Base Amount	1987 Estimate FTE-T	1987 Estimate Amount	Inc(+)/Dec(-) from 1986 Appropriation FTE-T	Inc(+)/Dec(-) from 1986 Appropriation Amount	Inc(+)/Dec(-) from 1986 Adjusted Approp.	Inc(+)/Dec(-) from 1987 Base FTE-T	Inc(+)/Dec(-) from 1987 Base Amount
OREGON AND CALIFORNIA GRANT LANDS															
Construction and Acqisition															
Building Construction............	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recreation Construction..........	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transportation Construction......	5	199	5	199	-9	190	5	199	5	199	0	0	9	0	0
Access Acquisition...............	5	315	5	329	-14	315	5	329	5	329	0	0	14	0	0
Subtotal	10	514	10	528	-23	505	10	528	10	528	0	0	23	0	0
Maintenance															
Building Maintenance.............	4	479	4	476	-20	456	4	475	4	475	0	-1	19	0	0
Recreation Maintenance...........	17	792	20	954	-41	913	20	950	18	800	-2	-154	-113	-2	-150
Transportation Maintenance.......	29	2706	29	2700	-116	2584	29	2695	27	2345	-2	-355	-239	-2	-350
Subtotal	50	3977	53	4130	-177	3953	53	4120	49	3620	-4	-510	-333	-4	-500
Renewable Resource Management															
Timber Management................	526	24062	524	23930	-1029	22901	524	23857	520	23000	-4	-930	99	-4	-857
Timber Development and Reforestation................	346	23850	346	22140	-952	21188	346	22093	346	19218	0	-2922	-1970	0	-2875
Timber Protection................	3	1868	3	1987	-85	1902	3	1987	3	1987	0	0	85	0	0
Other Forest Resources...........	56	2408	56	2667	-115	2552	56	2662	54	2412	-2	-255	-140	-2	-250
Subtotal	931	52188	929	50724	-2181	48543	929	50599	923	46617	-6	-4107	-1926	-6	-3982
Planning and Data Management															
Planning.........................	0	48	2	183	-8	175	2	183	2	183	0	0	8	0	0
Data Management..................	4	212	4	212	-9	203	4	212	4	212	0	0	9	0	0
Subtotal	4	260	6	395	-17	378	6	395	6	395	0	0	17	0	0
TOTAL REQUIREMENTS	995	56939	998	55777	-2398	53379	998	55642	988	51160	-10	-4617	-2219	-10	-4482

Justification of Base Adjustments

Oregon and California Grant Lands

	FTE	Amount
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellation	---	+2,398

The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L.99-177) requires a 4.3 percent reduction in non-exempt programs in FY 1986. Since the 4.3 percent reduction applies to FY 1986 only, this adjustment is made to allow a more comparable basis for showing program changes from FY 1986 to FY 1987.

	FTE	Amount
Anticipated savings from management initiatives	---	-135

Savings result from reductions in personnel costs achieved by refilling vacant positions at lower grades and by restructuring vacant jobs.

Justification of Program and Performance

Appropriation: Oregon and California Grant Lands

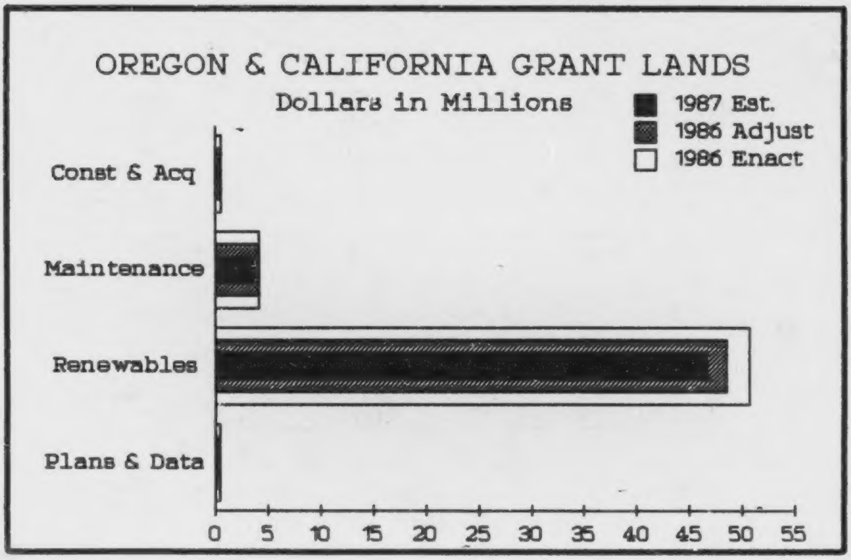
(dollar amounts in thousands)

Activity		1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Construction and Acquisition						
BLM	$	528	505	528	528	---
	(FTE-T)	(10)		(10)	(10)	(---)
Maintenance						
BLM	$	3,880	3,703	3,870	3,370	-500
	(FTE-T)	(53)		(53)	(49)	(-4)
Federal Highway Administration	$	250	250	250	250	---
	(FTE-T)	(---)		(---)	(---)	(---)
Subtotal	$	4,130	3,953	4,120	3,620	-500
	(FTE-T)	(53)		(53)	(49)	(-4)
Renewable Resources Management						
BLM	$	50,624	48,443	50,499	46,517	-3,982
	(FTE-T)	(929)		(929)	(923)	(-6)
Federal Highway Administration	$	100	100	100	100	---
	(FTE-T)	(---)		(---)	(---)	(---)
Subtotal	$	50,724	48,543	50,599	46,617	-3,982
	(FTE-T)	(929)		(929)	(923)	(-6)
Planning and Data Management						
BLM	$	395	378	395	395	---
	(FTE-T)	(6)		(6)	(6)	(---)
Total Requirements	$	55,777	53,379	55,642	51,160	-4,482
	(FTE-T)	(998)		(998)	(988)	(-10)

Authorization

43 U.S.C. 1181 P.L. 75-405	The Oregon and California Grant Land Act of 1937 Act provides for conservation, management, permanent forest production, and sale of timber from the Revested Oregon and California Railroad Grant Lands and Coos Bay Wagon Road lands.
53 Stat. 753	The Act of May 24, 1939 relates to the disposition of funds from the Coos Bay Wagon Road Grant Lands located in western Oregon.
16 U.S.C. 594 P.L. 67-315	The Timber Protection Act of 1922 provides for the protection of timber from fire, disease, and insects.
P.L. 94-579 43 U.S.C. 1702	The Federal Land Policy and Management Act of 1976 applies to all "public lands" which include the O&C Grant Lands by definition (43 U.S.C. 1702). However, Section 701(b) provides that in the event that any provision of FLPMA is in conflict with or inconsistent with the O&C Act and the Coos Bay Wagon Road Act insofar as they relate to management of timber resources and disposition of revenue from lands and resources, the latter Acts will prevail.

In addition, other statutes regarding natural resource programs apply in varying degrees to management of the O&C and Coos Bay Wagon Road (CBWR) lands in western Oregon. These are discussed as necessary under each O&C program justification.



Activity Summary

Activity: Construction and Access

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Building Construction	---	---	---	---	---	---
Recreation Construction	---	---	---	---	---	---
Transportation Construction	199	199	190	199	199	---
Access Acquisition	315	329	315	329	329	---
Total	514	528	505	528	528	---

Justification of Program and Performance

Activity: Construction and Acquisition
Subactivity: Building Construction

(Dollar amounts in thousands)

	1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	---	---	---	---	---
(FTE-T)	(---)	(---)	(---)	(---)	(---)

Objective

The objective of the building construction program is to construct those facilities necessary to support resource management. Some specific projects which have been constructed include seed orchard buildings and district office complexes.

Benefits derived from the building construction program vary from providing office space to providing a controlled environment for tree seed processing and seeding production in greenhouse facilities.

FY 1987 program

No building construction projects are proposed for 1987. No survey and design is needed in 1987.

Justification of Program and Performance

Activity: Construction and Acquisition
Subactivity: Recreation Construction

(Dollar amounts in thousands)

	1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	---	---	---	---	---
(FTE-T)	(---)	(---)	(---)	(---)	(---)

Objective

The objective of the recreation construction program is to provide recreation facilities on O&C and related lands which are easy to maintain, provide for visitor health and safety, and meet visitor demand.

FY 1987 program

The recreation construction program is a support activity to the recreation management program on O&C lands. Activities include new construction, major renovation, and replacement of existing recreation facilities. No recreation construction projects are proposed for 1987. No survey and design is needed in 1987.

Justification of Program and Performance

Activity: Construction and Acquisition
Subactivity: Transportation Construction

(Dollar amounts in thousands)

	1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	199	190	199	199	---
(FTE-T)	(5)		(5)	(5)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Transportation Construction	199	-9	190

The impact of the P.L.99-177 cancellation of $9,000 will be the deferral of approximately one-half of the new sign installation work (about 100 fewer signs installed).

Objective

The major objective of the transportation construction program is to provide a safe and energy-efficient transportation system for access to western Oregon lands for management, protection, and utilization of the timber, and recreation and other natural resources. This includes the construction of roads, trails, bridges and major culverts.

FY 1987 program

The 1987 estimate is $199,000 and 5 FTE-T.

The 1987 program level supports the timber management program by providing the transportation planning and survey and design work for access roads to permit development and harvest of the timber resource. More specifically, the program provides for:

- Designing road access to areas for management purposes and for timber operations where there is insufficient merchantable timber value in the area to construct the road under the terms of a timber sale contract. Generally, these are areas where access is needed for management of second-growth timber for stand improvement. The program also plans access for commercial thinning volume to allow utilization of marginal value timber.

- Designing road access to merchantable timber areas where the road construction work is relatively difficult or will involve more complex operations than the average timber purchaser would normally have equipment and labor skills to accomplish. This would include projects involving large amounts of rock excavation, difficult rock quarry and crushing operations, paving operations, large amounts of materials large or complex drainage structures and bridges, or complex stabilization work such as horizontal drains or retaining wall structures.

The following table displays accomplishments in 1985 and estimated workloads in 1986 and 1987:

Workload Measures	1985 Actual	1986 Estimate	1987 Estimate & Base	Inc. (+) Dec. (-) from Base
Sign installation (number)	200	200	200	---
Project plans (number)	5	5	5	---
Survey and design (miles)	20	20	20	---

Justification of Program and Performance

Activity: Construction and Acquisition
Subactivity: Access Acquisition

(Dollar amounts in thousands)

	1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
$	329	315	329	329	---
(FTE-T)	(5)		(5)	(5)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Access Acquisition	329	-14	315

The impact of the P.L. 99-177 cancellation of $14,900 will be the deferral of the acquisition of one multiple-use easement which will not result in any impact to the timber management program.

Objectives

The major objectives of the access acquisition program are as follows:

- o Obtain and maintain legal access to public lands in support of the forest management program. Legal access must be provided not only to support the timber sale program, but for all forest management activities such as reforestation, thinnings, fertilization, and various other silvicultural activities.
- o Obtain and maintain necessary legal access for the general public. Examples are access to developed recreation sites and to large tracts for extensive public uses such as hunting, fishing, etc.

FY 1987 program

The FY 1987 estimate is $329,000 and 5 FTE-T.

Legal access for forest management may be provided by an easement or by a reciprocal road use agreement, while legal access for the general public is normally provided by an easement. It is essential that adequate lead-time be given to obtain access in order to ensure that legal access is available when management actions are scheduled to take place. A leadtime of two years or more may be needed, depending upon the complexity of the road system, the number of owners involved, the attitude of the owners, and the ultimate need to exercise the right of eminent domain.

The primary benefits of the access acquisition program include:

- o Providing continuous legal access so that intensive management practices can be applied wherever and whenever silvicultural needs dictate.
- o Increased bid prices on those timber sales offered with access assured to all qualified bidders. The exact quantification of this benefit is difficult to obtain because of the many factors which affect bid prices. However, in any given year, an average increase of only 40 cents per MBF over the appraised price on the timber sales offered would fully cover the entire cost of the access program.
- o Providing continuous legal access to the public for full use and enjoyment of the O&C lands.

The access acquisition program includes easement survey, negotiations, appraisals, acquisition of title evidence, and payment for use. Workload is displayed in the following table:

Workload Measure	1985 Actual	1986 Estimate	1987 Estimate and base	Inc. (+) Dec. (-) from Base
Easements acquired (#)	30	28	28	---

Activity Summary

Activity: Maintenance

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Building Maintenance	479	476	436	473	473	---
Recreation Maintenance	782	854	713	950	800	-150
Transportation Maintenance	2,716	2,800	2,384	2,697	2,347	-350
Total	3,977	4,130	3,533	4,120	3,620	-500

Justification of Program and Performance

Activity: Maintenance
Subactivity: Building Maintenance

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
$	676	656	675	675	---
(FTE-T)	(4)		(4)	(4)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Building Maintenance	676	-20	656

The impact of the P.L. 99-177 cancellation of $20,000 will be the deferral of some maintenance such as landscape or parking lot upkeep which does not affect health or safety conditions. This will be accomplished by reducing temporary employment normally used for this type of work.

Objectives

The objective of the building maintenance program is to protect the capital investment made in the BLM-owned buildings and related facilities in western Oregon and to ensure that the facilities continue to provide the service intended throughout their life cycle. Specific objectives include:

- Inspection of all buildings, yards, and parking lots and identification of needed repairs;
- Repair of interior and exterior of buildings as required;
- Repair and/or replacement of water, sewage and electrical utility systems that do not meet safety and health codes; and
- Resurfacing of wareyards and driveways, repair of fences, and upkeep on landscaping at administrative facilities.

FY 1987 program

The 1987 estimate level is $675,000 and 4 FTE-T.

The types of facilities maintained vary from district office buildings to tree seed extractories and greenhouses for seedling production. The following table displays the number of existing buildings and systems included in the maintenance schedule:

Type of Facility	Number	Size
Office Buildings	7	147,000 sq. ft.
Warehouses	63	61,200 sq. ft.
Flammable liquid storage buildings	4	3,800 sq. ft.
Radio equipment buildings	8	2,300 sq. ft.
Pumphouses	3	8,400 sq. ft.
Seed cleaning facilities	1	7,300 sq. ft.
Seed extraction facilities	4	4,400 sq. ft.
Greenhouses/shadehouses	4	26,200 sq. ft.
Shop buildings	2	38,500 sq. ft.
Grounds (wareyards, lawns)	44	143 acres
Water systems	37	-
Sewer systems	41	-

A majority of the work is accomplished by BLM employee labor and expertise. Specialized expertise for sophisticated control systems is contracted to local firms.

The 1987 program level funds maintenance on an as-needed basis on the facilities, grounds, and systems itemized above.

Justification of Program and Performance

Activity: Maintenance
Subactivity: Recreation Maintenance

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	954	913	950	800	-150
(FTE-T)	(20)		(20)	(18)	(-2)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Recreation Management	954	-41	913

The impact of the P.L. 99-177 cancellation of $41,000 will be the reduction of maintenance activities on the lower use, undeveloped sites. This will be accomplished by reducing temporary employment normally used for this work.

Objectives

The objective of the program is to ensure that BLM's western Oregon recreation sites are operated and maintained so that: (1) the public receives the maximum recreational benefits from the facilities, (2) natural and cultural resources of the area are not destroyed through overuse, (3) public user and employee health and safety are protected, and (4) the facilities are maintained so that they last for their designed useful life.

Base program

The 1987 base level is $950,000 and 20 FTE-T.

The recreation maintenance program provides services such as disposing of garbage, servicing sanitation facilities, keeping drinking water safe, mitigating hazards, and repairing and maintaining facilities on the 53 developed recreation sites and 65 undeveloped sites in western Oregon. The following table displays the facilities included in the maintenance schedule:

Type of Facility (unit of measure)	Number
Developed campsites (# of family units)	702
Developed picnic sites (# of family units)	682
Undeveloped picnic sites (#)	65
Water systems (#)	40
Sewer systems (#)	24
Trails within recreation sites (miles)	19
Signs (#)	90

All developed facilities receive preventive and operational maintenance each year to maintain health and safety standards and to protect the capital investment. Painting and structural maintenance is done on an as-needed basis.

A combination of labor sources is used to accomplish the annual workload and meet the stated objectives including BLM laborers and recreation technicians, and contract, volunteer, and user participation. Written directives covering visitor safety and hazard management and use permits for developed sites and site management have been issued to improve consistency in implementation of maintenance levels from district to district.

The facilities are provided to meet the requirements of the O&C Act for recreation as a facet of forest land management. Having recreation use concentrated in specific, defined areas reduces conflicts with other resource management activities.

High maintenance costs have forced BLM to evaluate its maintenance program in Western Oregon, particularly at "out of the way" sites and at sites which experience low visitor use. In some instances, services have been reduced. One site has been closed. A greater emphasis is being placed upon the responsibility of the site user to clean up his own area. Volunteers are also assisting in keeping sites clean. BLM has entered into cooperative agreements for maintenance of three major sites by local governments and non-profit organizations.

Decrease from 1987 Base

(Dollars in thousands)

	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	950	800	-150
(FTE-T)	(20)	(18)	(-2)

The proposed decrease of $150,000 and 2 FTE will be accomplished by reducing periodic preventive maintenance, such as fix-up, repainting and the like on all sites to that level necessary to maintain health and basic safety standards, by continuing to use volunteers and cooperative agreements with non-profit organizations, and by greater reliance on site users to clean up their own area after use. Contract requirements will be reduced to a level consistent with the above. Sites with the lowest use will be targeted for the greatest reduction.

Distribution of change by object class

The object class detail for the proposed decrease of $150,000 is as follows:

	FTE	Amount
Personnel compensation	2	$ 55,000
Personnel benefits		9,000
Travel and transportation of persons		5,000
Transportation of things		15,000
Other services		35,000
Supplies and materials		31,000
Total		$150,000

Justification of Program and Performance

Activity: Maintenance
Subactivity: Transportation Maintenance

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
	$	2,450	2,334	2,445	2,095	-350
BLM	(FTE-T)	(29)		(29)	(27)	(-2)
Federal Highway	$	250	250	250	250	---
Administration	(FTE-T)	(---)		(---)	(---)	(---)
Total Requirements	$	2,700	2,584	2,695	2,345	-350
	(FTE-T)	(29)		(29)	(27)	(-2)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Transportation Maintenance	2,700	-116	2,584

The impact of the P.L. 99-177 cancellation of $116,000 will be the deferral of maintenance on approximately 100 miles of secondary roads, elimination of some roadside brush control contracts and deferral of the purchase of some replacement equipment. These actions will have no immediate effect on the O&C timber management program or availability of access to public roads for the general public.

Objective

The objective of the transportation maintenance program (which is funded through a combination of currently appropriated funds and a permanent appropriation) is to maintain the BLM's western Oregon forest road and trail system in the condition needed for proper land and resource management, for the safe and efficient transport of forest products from the forest to the milling, manufacturing or loading facility; and safe access to forest lands for the forest industry, BLM personnel, and the general public.

Bureau of Land Management

Base program

The 1987 base level for this subactivity from O&C funds is $2,445,000 and 29 FTE-T.

The Bureau is responsible for maintaining a total network of approximately 8,468 miles of road and 80 miles of trail in western Oregon. All trails are maintained each year, however, the maintenance schedule for roads varies each year, according to actual timber harvest activity and weather damage.

The basic road maintenance schedule plans are for yearly maintenance on 4,000 to 4,800 miles of primary timber haul road and for maintenance, on an as-needed basis, for those parts of the secondary system that receive higher than normal use, or which have sustained damage from natural causes. Maintenance includes the inspection and maintenance of all bridges and structures that are an integral part of the road system.

Maintenance of the road system is accomplished primarily by BLM crews plus contracts for materials such as asphalt, aggregate, fuels, culverts, equipment, and supplemental equipment rental. Heavy equipment operators skilled in road maintenance work are required along with the transportation engineering experts knowledgeable in timber management practices and other resource management needs for transportation facilities.

Road maintenance on spur roads is accomplished by timber purchasers during active timber sales under the terms of the sale contract, and by agreement with adjoining landowners such as timber companies and other governmental agencies, primarily counties. The BLM timber access road system is one part of a total system that provides access to Federal and private timber lands. A proportionate share of the initial cost of a road is paid by private industry by means of a road use fee system. The share will vary for each road, depending upon the percentage of the total timber volume owned by each party that is tributary to the road or that will eventually be transported over the road. If 50 percent of the volume to be transported over a specific road is private, then private companies will pay 50 percent of the cost of the road by means of road use fees as the timber is harvested and hauled. Funds collected in road use fees are deposited in the Treasury to amortize the Government's original cost for the non-government share of the road use.

In addition to road use fees, each commercial user of BLM roads is assessed a road maintenance fee. Funds collected in maintenance fees each year become a part of the total funds available for road maintenance through a permanent appropriation to BLM. In 1987, the amount estimated to be available from the permanent appropriation is $5.4 million. (See Justifications under the Miscellaneous Permanent Appropriations section.) This would provide a total of $7,734,000 for road maintenance work. The total of current appropriations and permanent appropriation amounts is planned for use to accomplish the total maintenance workload.

Federal Highway Administration (FHWA)

FY 1987 program

The FY 1987 estimate is $250,000. The FHWA provides road surfacing aggregate (crushed rock) to BLM for use in the Bureau's road and bridge maintenance program. The amount of aggregate obtained from FHWA varies each year according to the amount of maintenance required as a result of road use and weather damage.

The funds for this work are transferred from BLM to FHWA each year in accordance with the provisions of the appropriations language for "O&C Grant Lands."

Decrease from 1987 Base

(dollars in thousands)

		1987 Base	1987 Estimate	Difference
	$	2,445	2,095	-350
BLM Program	(FTE-T)	(29)	(27)	(-2)

A decrease of $350,000 and 2 FTE is proposed for 1987.

This will be accomplished by deferring the annual maintenance on 300 miles of the lowest priority multiple-use roads, the deferral of maintenance on 20 miles of trails, and the elimination of some roadside brush control.

Changes in the O&C transportation maintenance program workload units for 1985, 1986 and 1987 are shown in the following table.

Workload Measure	1985 Actual	1986 Estimate	1987 Base	1987 Estimate	Inc. (+) or Dec. (-)
Road maintenance (miles)	5,000	6,038	6,038	5,738	-300
Trail maintenance (miles)	80	80	80	60	-20
Bridge maintenance (#)	79	76	76	76	---

Distribution of change by object class

The object class detail for the proposed decrease of $350,000 is as follows:

	FTE	Amount
Personnel compensation	2	$ 55,000
Personnel benefits		9,000
Travel and transportation of persons		5,000
Transportation of things		25,000
Communications, utilities and miscellaneous charges		8,000
Other services		133,000
Supplies and materials		75,000
Equipment		40,000
Total		$350,000

Activity Summary

Activity: Renewable Resources Management

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Timber Management	24,062	23,930	22,901	23,857	23,000	-857
Timber Development and Reforestation	23,850	22,140	21,188	22,093	19,218	-2,875
Timber Protection	1,868	1,987	1,902	1,987	1,987	---
Other Forest Resources	2,408	2,667	2,552	2,662	2,412	-250
Total	52,188	50,724	48,543	50,599	46,617	-3,982

Justification of Program and Performance

Activity: Renewable Resources Management
Subactivity: Timber Management

(Dollar amounts in thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
BLM	$	23,830	22,801	23,757	22,900	-857
	(FTE-T)	(524)		(524)	(520)	(-4)
Federal Highway Administration	$	100	100	100	100	---
	(FTE-T)	(---)		(---)	(---)	(---)
Total Requirements	$	23,930	22,901	23,857	23,000	-857
	(FTE-T)	(524)		(524)	(520)	(-4)

Impact of Public Law 99-177

	1986 Enacted To Date	P.L. 99-177 B.A. Cancellation	1986 Adjusted Approp.
Timber Management	23,930	-1,029	22,901

The impact of the P.L. 99-177 cancellation of $1,029,000 will be to reduce new timber sale offerings; however, this will mostly be offset by additional reofferings of sales from the "buy back" timber from the Federal Timber Contract Payment Modification Act (FTCPMA) of 1984. Substituting "buy-back" timber offerings for new sales reduces the total cost of offering the full allowable cut because certain actions will not need to be accomplished again, since they were already done for the sale when it was initially offered and sold.

Objectives

The major objectives of the timber management program in western Oregon are to:

- Offer 1,183 million board feet of timber for sale annually from western Oregon lands, and
- Prepare and manage timber sale contracts to insure that the timber is harvested according to contract stipulations and that payments are made according to contract provisions.

Bureau of Land Management

Base program

The 1987 Base level is $23,757,000 and 524 FTE. Under the timber management program, timber is offered for sale in accordance with the O&C Act of 1937 (43 U.S.C. 1181). This law provides that the O&C Grant Lands shall be managed as a permanent source of timber in a manner which protects watersheds, regulates stream flows, provides for recreational facilities, and contributes to local economic stability.

The O&C Act directs that the Secretary announce an allowable harvest level which shall be offered annually for sale given reasonable prices in a normal market.

Under the base program, BLM will offer the current allowable cut level of 1,183 million board feet of timber. This is a slight reduction from the 1,185 million board feet identified in BLM's timber management plans because of certain lands in western Oregon being designated as wilderness by Congress.

The Court-ordered ban on the use of herbicides and economic conditions in the timber industry continue to create uncertainty in the timber management program.

Timber Management Program Components

The major work elements of the timber management program are as follows:

Inventory and Timber Management Planning

This element includes the gathering of inventory and silvicultural data for preparation and maintenance of land use and timber management plans, and the computation of the allowable harvest levels.

The gathering of extensive inventory and silvicultural data for timber management planning is done on a 10-year cycle. The eight years between data-gathering efforts are considered the normal years in this element with workloads consisting of the maintenance of technical inventory records and maintenance and updating of timber management and land use plans.

The latest series of timber management plans were completed in 1983. Approximately 2.1 million acres of commercial forest lands, 87 percent of the land administered by BLM in the area, are covered by these plans. These plans, as amended, allow an annual harvest level of 1,183 million board feet.

Timber Sale Planning

Timber sale planning is essential to identify physical and legal access requirements, cadastral survey needs, special road design and other considerations. The checkerboard land patterns and the steep ridges which characterize western Oregon commercial timber lands contribute to the complexity of the planning process which begins with identification of potential sales areas 5 years in advance of sale. Outyear plans are refined annually by deleting problem tracts and adding replacement tracts. The process culminates in the annual timber sale plan on which the forest industry bases its own plans for purchasing BLM timber.

Timber Sale Preparation

This element includes all activities necessary to offer timber for sale, including:

1. Sale area layout
2. Environmental analysis
3. Resource conflict resolution
4. Timber values determination and appraisal
5. Contract preparation
6. Sale advertising and award

The timber sale preparation process starts with field crews physically posting and marking sale boundaries, road locations, log skidding trails, and other work areas needed for the harvest operation. When sale layout is complete, the area is examined to determine the specific effects of logging it on any archaeological and other resource values such as wildlife, fisheries, soils, water and air. All of these data are used in the preparation of the environmental analysis.

The environmental analysis process identifies site-specific adverse impacts associated with the proposed logging operation and prescribes mitigating measures. Sale boundaries, road locations, and decking areas are adjusted to attain the prescribed mitigation.

A timber sale contract is prepared for each sale. The contract specifies standard stipulations for compliance by the purchaser as well as special stipulations based upon any unique characteristics of the sale area. Normally, western Oregon BLM timber is sold at oral auction with successful bidders agreeing to the terms of the contract. Historically, the purchaser has had 3 years to harvest the timber, although contracts with shorter harvest periods have recently been offered in response to current economic conditions.

Timber Sale Contract Administration

This work involves on-the-ground supervision during the term of the timber sale contract. Supervision is provided to ensure that the purchaser adheres to the terms of the contract and that timely payments are made as timber is cut. Specific workloads are:

1. Approval of the logging plan for the sale area.
2. Monitoring road and logging facilities construction.
3. Monitoring progress of timber cutting and calculating payments due.
4. Ensuring that payment due is received before additional timber is harvested.
5. Processing contract modifications as needed.
6. Monitoring the total logging operation until all timber has been removed from the sale area.
7. Monitoring the disposal of logging debris (slash).
8. Processing contract expirations and terminations.

Federal Highway Administration (FHWA)

FY 1987 program

The 1987 Estimate is $100,000. The Federal Highway Administration provides BLM with a variety of specialized engineering services associated with the location and design of timber access roads and evaluation of rock quarry sites. The kinds and amount of services rendered by the FHWA varies from year to year depending upon the difficulty of road location and number of quarry sites needed. The following is the average workload output. It is estimated that the 1987 workload will be at the average level.

Item	Amount
Rock core drilling	5,000 lin. ft.
Material testing	200 tests
Roads requiring special engineering consulting services	30 roads

The funds for this work are transferred from BLM to FHWA each year in accordance with the provisions of the appropriations language for "Oregon and California Grant Lands."

Decrease from 1987 Base

(dollars in thousands)

		1987 Base	1987 Estimate	Difference
BLM Program	$	23,757	22,900	-857
	(FTE-T)	(524)	(520)	(-4)

The $857,000 and 4 FTE reduction is possible because of reoffering volume from "buy back" sales, and improved procedures implemented for the Fall, Buck and Scale Contracts (Volume Estimating), property line brushing contracts, and timber cruising and appraisal techniques, which are resulting in lower management costs to the Bureau.

As a result of depressed conditions in the lumber markets, Congress passed the Federal Timber Contract Payment Modification Act (FTCPMA) of 1984. Under certain conditions, the Act allowed purchasers of Federal timber to sell back certain of their timber sale contracts which had become uneconomical to harvest. BLM will include a portion of this returned timber (400 mmbf) in its timber sale program in 1987. Savings will be realized from reoffering previously sold timber for sale. These savings result from the fact that some of the work involved in preparing the sales when the timber was initially sold is still valid and need not be done again.

The greater part of the savings, however, will accrue to the timber development and reforestation program because practices which supported the original sale have already been accomplished. Consequently, timber development practices in 1987 which would otherwise be necessary to support the reoffered sale level are not necessary. (See the Timber Development and Reforestation Subactivity.)

A total of 271 sales with volume totalling 1,300 MMBF qualified as "buy out" contracts under FTCPMA. The Bureau plans to re-offer 350 MMBF in 1986 and an estimated 400 MMBF in 1987 from "buy back" sales.

Changes in the O&C timber management program workload units for 1985, 1986 and 1987 are shown in the following table:

Workload Measure	1985 Actual	1986 Estimate	1987 Base	1987 Estimate	Inc. (+) or Dec. (-)
Inventory (acres)	460,000	1,118,000	1,118,000	1,118,000	---
Timber sale plans -					
Annual (#)	21	22	22	22	---
5-year (#)	21	22	22	22	---
Timber volume prepared (MMBF)	1,132	1,183	1,183	1,183	---
Sales prepared (#)	300	300	300	300	---
Timber volumes sold/offered (MMBF)	1,006	1,183	1,183	1,183	---
Timber volume reoffered from "Buy Back" contracts (MMBF)	(---)	(350)	(---)	(400)	+400
Contracts administered (#)	500	500	500	500	---
Total timber volume sold - not harvested (MMBF EOY)	3,600	2,300	2,300	2,200	-100
Value of timber sold ($000)	80,480	106,470	118,300	118,300	---
Average sale price ($/MBF)	80	90	100	100	---
Total volume harvested (MMBF)	936	950	1,030	1,130	+100

Distribution of change by object class

The object class detail for the proposed decrease of $857,000 is as follows:

	FTE	Amount
Personnel compensation	4	$109,000
Personnel benefits		18,000
Travel and transportation of persons		10,000
Transportation of things		20,000
Other services		625,000
Supplies and materials		75,000
Total		$857,000

Justification of Program and Performance

Activity: Renewable Resources Management
Subactivity: Timber Development and Reforestation

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$ (FTE-P)	[illegible] ([illegible])	[illegible]	[illegible] ([illegible])	[illegible] ([illegible])	[illegible] ([illegible])

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 G.R. Cancellation	1986 Adjusted Approp.
Timber Development and Reforestation	[illegible]	[illegible]	[illegible]

The impact of the P.L. 99-177 cancellation of $[illegible] will be to reduce planned timber development practices scheduled for 1986. The impact of this reduction will not affect program accomplishments because less work is needed when net timber sale offerings are replaced with additional reofferings from the "buy back" timber sales under the Federal Timber Contract Payment Modification Act of 1984. The costs of forest development are reduced because the reoffered timber represents nonchargeable volume, and the intensive forest development practices that contributed to the increased allowable cut levels are not necessary to support this reoffered timber volume since they have already been completed for the timber volume when originally sold.

Objectives

The major objective of the timber development and reforestation program is to accomplish the various practices that allowable cut plans indicate are necessary to produce that level of timber production on a sustained yield basis, including:

- Reforest harvested areas promptly;
- Maintain or achieve optimum conditions for tree and stand growth (thinnings/releases);
- Improve site fertility (fertilization); and
- Protect seedlings from growth reduction or death caused by animals, heat, vegetation, and diseases.

Base program

The 1987 Base level is $[illegible] and [illegible] FTE's. The program provides for reforestation and other timber development practices which increase the productivity of the timber lands in western Oregon. Reforestation is necessary not only to ensure prompt forest regeneration, but also to ensure that the new forest will contain the most desirable timber species (i.e., Douglas Fir in western Oregon).

Prescribed burn and site preparation are frequently required prior to the actual reforestation. Land treatments, such as the use of herbicides, are sometimes necessary so that planted seedlings can achieve full development without undue competition from other species which tend to proliferate in newly cut areas. Later, pre-commercial thinning will be used to cull selected trees to concentrate light, moisture, and nutrients on fewer trees of better quality. These and other practices result in a greater quantity and quality of merchantable timber in a given stand. In addition, BLM, through its tree improvement program will improve the genetic traits of the trees themselves.

The development and reforestation workload is accomplished principally through contracting specific land treatment projects (i.e., slash burning, tree planting, thinning, etc.) to the private sector. An estimated 95 percent of the projects are accomplished by contractors. The remaining 5 percent are done with Bureau personnel, usually temporary employees.

Types of work which involve permanent BLM personnel primarily include studies and research, environmental analysis, inventory, project planning, layout and contract preparation, contract administration, and seed orchard operation. These elements are described as follows:

Studies and Research - Includes all work associated with field studies and research that is done to identify development needs, monitor results of past actions, and coordinate activities associated with Forestry Intensified Research (FIR).

Included in the Base is $1,292,000 for the adaptive and fundamental phases of FIR. This program was developed to improve reforestation and timber stand improvement technology for southwest Oregon. Work is primarily performed by Oregon State University in participation with BLM, the Forest Service, the Oregon State Forestry Department, and various industrial and private landowners. Initiated in 1978, FIR is in the final stages of its original 10-year schedule. There will be an extension of several years in the adaptive phase to facilitate application of the findings.

Environmental Assessment - Includes all work involved in preparing and reviewing environmental impact statements relating to intensive forest management practices. For 1987 it is assumed that the environmental statement on use of herbicides for timber development work will be completed and accepted by the Federal Court; thus allowing herbicides to again be available for use.

Inventory, Project Planning, Layout and Contract Preparation - Includes all work involved in conducting post-treatment surveys to evaluate the effectiveness of land treatments and preparing land treatment contracts for bid advertisement and award.

Contract Administration - Includes all work associated with the supervision and administration of genetic improvement, land treatment, research and other support contracts.

Seed Orchard Operation - Includes all work associated with the development, maintenance, and operation of the Walter Horning, Charles Sprague, Provolt, and Lorane seed orchards, which include progeny test plantations where genetically superior trees are grown for seed production.

Decrease from 1987 Base

(dollars in thousands)

	1987 Base	1987 Estimate	Difference
$	22,093	19,218	-2,875
(FTE-T)	(346)	(346)	(---)

The $2,875,000 decrease is the result of two factors. First, $2,611,000 of the reduction is the result of substituting "buy back" sale reofferings from the FTCPMA for new timber sales in the 1986 and 1987 timber sale programs. Since the timber development practices associated with these sales were completed in support of the original sale, there is no need to do it again for reoffered volumes.

Second, there is a reduction of $264,000 as the result of FIR studies and research winding down. Originally, the Bureau had made preliminary plans to investigate the feasibility of the Coastal Oregon Productivity Enhancement (COPE) research program in 1987. However, because of other higher program priorities, the analysis of COPE will be deferred at this time.

Changes in the O&C timber development and reforestation program workload units for 1985, 1986 and 1987 are shown in the following table:

Workload Measures	1985 Actual	1986 Estimate	1987 Base	1987 Estimate	Inc. (+) or Dec. (-)
Inventory (acres)	49,835	224,890	225,000	225,000	---
Site preparation (acres)	15,425	21,512	22,000	23,000	+1,000
Reforestation (acres)	23,292	22,370	22,370	23,000	+630
Maintenance (acres)	18,567	16,759	16,800	16,800	---
Timber stand improvement (acres)	(22,652)	(5,054)	(13,500)	(5,000)	(-8,500)
Pre-commercial thinning (acres)	16,731	5,054	8,000	5,000	-3,000
Fertilization (acres)	6,118	---	5,000	---	-5,000
Stand conversion (acres)	253	---	500	---	-500

Distribution of change by object class

The object class detail for the proposed decrease of $2,875,000 is as follows:

	Amount
Travel and transportation of persons	$ 50,000
Transportation of things	100,000
Other services	2,525 000
Supplies and materials	200,000
Total	$2,875,000

Justification of Program and Performance

Activity: Renewable Resources Management
Subactivity: Timber Protection

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	1,987	1,902	1,987	1,987	---
(FTE-T)	(3)		(3)	(3)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Timber Protection	1,987	-85	1,902

The impact of the P.L. 99-177 cancellation of $85,000 will be a reduced effort in contract administration and program management work. No reduction in the level of the timber protection contract will occur.

Objectives

The objective of the timber protection program is to protect 2,375,800 acres of western Oregon lands from damage by fire.

FY 1987 Program

The 1987 Estimate is $1,987,000 and 3 FTE-T. The program consists of fire protection through contract on 2,375,800 acres, at an annual cost of $1,867,000. The program also provides for the attendant contract administration and overall timber protection program management.

Actual fire protection for all lands under BLM jurisdiction in western Oregon is provided by the State of Oregon Department of Forestry. The existence of the highly effective State protection organization makes it unnecessary for BLM to establish and maintain its own fire suppression organization in western Oregon.

The historical 5-year average of fire occurrence in western Oregon is as follows:

- 34 human-caused fires annually
- 38 lightning-caused forest annually
- 1,232 acres burned annually
- 357 total fires in the past 5 years

Justification of Program and Performance

Activity: Renewable Resources Management
Subactivity: Other Forest Resources

(Dollar amounts in thousands)

Program Element		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Range Management	$	226	216	226	226	---
	(FTE-T)	(4)		(4)	(4)	(---)
Recreation Management	$	582	557	582	582	---
	(FTE-T)	(16)		(16)	(16)	(---)
Soil, Water and Air Management	$	669	640	669	669	---
	(FTE-T)	(15)		(15)	(15)	(---)
Wildlife Management	$	1,190	1,139	1,185	935	-250
	(FTE-T)	(21)		(21)	(19)	(-2)
Total Requirements	$	2,667	2,552	2,662	2,412	-250
	(FTE-T)	(56)		(56)	(54)	(-2)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Other Forest Resources	2,667	-115	2,552

The impact of the P.L. 99-177 cancellation of $115,000 will be the deferral of one range improvement and one wildlife project, reduced visitor assistance by not hiring temporary employees who normally provide some of this service, and deferral of some planned water quality monitoring work.

RANGE MANAGEMENT

Objectives

The major objectives of the range management program are to utilize available forage for livestock production, maintain and improve vegetative conditions, and accomplish vegetation-related resource management goals and objectives on western Oregon land.

FY 1987 program

The 1987 estimate is $226,000 and 4 FTE-T. This program provides for grazing administration on public lands in western Oregon. The O&C Act authorizes the Secretary, at his discretion, to lease O&C lands for grazing purposes when such use will not interfere with the production of timber or other purposes specified in the O&C Act. There are 138 grazing leases in western Oregon providing approximately 19,000 animal unit months (AUM's) of forage. The range management program workload consists primarily of authorizing and issuing grazing leases, collecting fees, providing necessary range use supervision and trespass control, and developing range improvement projects. Grazing use must be properly coordinated with intermingled and adjacent landowners. In several areas where there are large and well-blocked lands, coordinated resources management plans have been developed and needed management facilitating projects constructed. In addition, monitoring has been established and is periodically reviewed and evaluated to determine management effectiveness.

Management facilitating projects on O&C lands such as fences and water developments are needed to control the timing and degree of livestock grazing use. Proper livestock management is essential to ensure that maximum benefits result from removal of vegetation which competes with tree seedling establishment and to protect reforestation efforts. It is also needed to accomplish other vegetation-related management objectives such as the protection and improvement of important wildlife habitat areas and the protection of threatened and endangered plants and animals.

The primary benefits of the program are improvement of vegetation-related resource values. The principal benefit to timber production is removal of vegetation that competes with young trees and seedlings. If forage plants in reforested areas are grazed by livestock at appropriate times, the competitive influence of these plants on the establishment of tree seedlings is reduced. Once trees are established to the point where livestock grazing can have no harmful impacts on their further development, the authorization of grazing use results in harvesting a renewable resource that would otherwise go unused.

The following table displays actual workload accomplishments for 1985 and estimated accomplishments for 1986 and 1987:

Workload Measure	1985 Actual	1986 Estimate	1987 Estimate
Allotments monitored (#)	145	145	145
Leases administered (#)	138	138	138
Projects developed (#)	4	4	4

RECREATION MANAGEMENT

Objectives

The objectives of the recreation management program are to:

- Provide recreation opportunities, visitor services/information and the protection of high priority special recreation management areas, including the Rogue National Wild and Scenic River, Pacific Crest National Trail, Rogue River National Recreation Trail, and five major recreation facility areas (Loon Lake, Hyatt Lake, Wildwood, Fisherman's Bend, and Shotgun);
- Protect and maintain high quality scenic visual resources within designated scenic highway corridors, and State recreational management areas in support of cooperative management agreements;

- o Improve program cost effectiveness through the use of volunteer programs and coordination/cooperation with State, county and local recreation agencies and organizations; and

- o Ensure that all projects are in compliance with Section 106 of the National Historic Preservation Act and Section 2(b) of Executive Order No. 11593 for cultural resource protection and ensure that cultural resources are given full consideration in all land use planning and management decisions.

FY 1987 program

The FY 1987 estimate is $582,000 and 16 FTE-T. The western Oregon program is operated under the provisions of the O&C Act which directs that the O&C lands be managed for permanent forest production, including provision of recreation facilities. Because the provision of recreation facilities covers a wide range of recreation opportunities which vary from managing highly developed campground/picnic areas to monitoring dispersed recreation use areas, the program emcompasses workload from some 3 million visits made annually to 171 special recreation management areas and 22 extensive recreation management areas.

The primary efforts of the recreation management program are as follows:

- Provide a wide range of public recreation opportunities consistent with intensive forest management objectives, including management of Congressionally designated recreation areas. Through interpretive techniques, management of recreation use occurring on western Oregon timber lands provides a basis to provide greater public understanding and acceptance of intensive timber management techniques;

- Protect highly sensitive visual resource values consistent with intensive timber management activities;

- Preserve and manage archaeological and historic resources on western Oregon lands;

- Allow forest management project work to proceed in an orderly fashion in compliance with applicable laws and regulations without disruptions caused by protests and appeals; and

- Provide appropriate sites for natural history-research, which provide data that aid in resource program planning, including forest management.

The following table displays actual workload accomplishments for 1985 and estimated accomplishments for 1986 and 1987:

Workload Measure	1985 Actual	1986 Estimate	1987 Estimate
Inventory (acres)	3,500	8,700	10,000
Activity plans (#)	3	5	5
Permits (#)	120	122	125
Visitor services (8-Hr. patrol)	340	415	400
Protection projects (#)	20	11	10

SOIL, WATER AND AIR MANAGEMENT

Objectives

The objectives of the soil, water and air management program are to:

- Provide management with baseline inventory data on soil and water resources including information on soil capabilities, suitabilities, behavior and use limitations;
- Develop criteria and guidance for mitigating measures required so that forest resource utilization and development will not unnecessarily reduce soil productivity and water quality;
- Provide management with information on air quality, climatology and meteorology;
- Monitor water and air quality (i.e., acid rain, visibility) and evaluate conditions to ensure that Bureau activities and non-Bureau activities are not negatively impacting water or air quality; and
- Take necessary actions to ensure activities are in compliance with National and State laws and regulations.

FY 1987 program

The 1987 estimate is $669,000 and 15 FTE-T. This program fulfills provisions of the O&C Act which requires that O&C lands be managed for permanent forest production, including protection of watersheds and regulation of stream flow. The Bureau is also guided by Executive Order 12088, and is actively involved in Federal and State programs for smoke management, for acid rain monitoring, and for non-point source water quality problem identification and monitoring.

The benefits of the program accrue mainly to the resources and include:

1. Maintaining and increasing the soil's capability to produce wood.
2. Ensuring that timber sale plans and sites are in compliance with relevant laws and regulations.
3. Maintaining site productivity through on-site water management and design of water control facilities, i.e., bridges and culverts, so as not to jeopardize the forest road system.

The following table displays actual workload accomplishments for 1985 and estimated accomplishments for 1986 and 1987:

Workload Measure	1985 Actual	1986 Estimate	1987 Estimate
Activity plans (#)	---	3	3
Soil surveys (000's acres)	46	98	50
Water right documentation (#)	30	13	15
Air monitoring (# stations)	6	8	8
Watershed monitoring (# stations)	43	166	166
Watershed improvements (#)	51	23	25

WILDLIFE HABITAT MANAGEMENT

Objectives

The objectives of the wildlife habitat management program are to:

- Improve anadromous fisheries habitat.
- Comply with the Endangered Species Act (ESA) by implementing stipulations to avoid impacts of proposed actions on threatened or endangered (T/E) species. This will be completed within 4 months of the initial determination that a proposed action may affect any T/E species.
- Comply with Section 7 of the ESA by completing consulation with the Fish and Wildlife Service (FES) within 6 months of initial determination that an action may affect a T/E species.
- Comply with the ESA to aid in the recovery of T/E species.
- Comply with Executive Order No. 11990 by developing stipulations, mitigation, or other procedures for minimizing or avoiding adverse impacts of proposed actions on wetland or riparian habitat. This will be completed within 4 months of the initial determination that a proposed action may affect wetland or riparian habitat.

Base program

The 1987 base level is $1,185,000 and 21 FTE-T. The BLM wildlife habitat management program maintains and improves wetland, riparian, aquatic, and terrestrial habitats for fish and wildlife species and T/E plant and animal species occurring on the public lands in western Oregon.

One of the most valuable resources in western Oregon is its stream habitat for anadromous fish. In recent years, however, the number of surviving coho salmon has been on the decline. This has resulted in a shortened fishing season, adverse economic effect on commercial fisheries, and loss of sport fishing opportunities. In 1985, BLM received an additional $245,000 to enhance its stream habitat improvement work to increase the number of anadromous fish. In 1986, a total of $497,000 was provided for anadromous fish habitat improvement. With these funds BLM has increased stream improvement projects, intensified monitoring studies, and initiated a planning effort on a 5-year program to improve stream habitat for anadromous fisheries.

Included in the 1987 Base is $300,000 for habitat improvement projects on 13 streams in western Oregon. The type of improvement projects include opening of blocked streams in mitigation of past timber harvesting practices, and efforts to provide more spawning areas to improve fish survival rates. Specific practices include log jam removal, gravel for replacement in spawning areas, brush removal, and placement of instream structures to improve fish passage over impassable structures. These efforts are also part of BLM's role in an interagency cooperative effort with the State Coho Salmon Enhancement Program.

Benefits of the wildlife habitat management program include providing wildlife habitat for a variety of consumptive and nonconsumptive uses by the general public. The wildlife program provides the timber management program with the required biological expertise to implement Federal laws such as the ESA, Sikes Act, Migratory Bird Treaty Act, and the Wetlands and Water Quality Executive Orders and thus, facilitate an orderly, effective and environmentally sound timber management program. Inventories are conducted to identify and quantify the habitat of terrestrial, aquatic, wetland, and T/E species into various condition classes and needs.

Decrease from 1987 Base

(dollars in thousands)

	1987 Base	1987 Estimate	Difference
$	1,185	935	-250
(FTE-T)	(21)	(19)	(-2)

The reduction of $250,000 and 2 FTE's will be accomplished by reducing the anadromous fish program to approximately the 1985 level. The Bureau will continue implementation of the 5-year anadromous fish enhancement plan, but will defer some scheduled improvements to future years and, consequently, reduce some associated maintenance as well.

The following table compares actual workload for 1985 with planned accomplishments for 1986 and 1987:

Workload Measure	1985 Actual	1986 Estimate	1987 Base	1987 Estimate	Inc. (+) or Dec. (-)
Inventory (000's acres)	1	29	29	29	---
Activity plans (#)	2	2	2	2	---
Monitoring (# plans monitored)	143	145	145	147	+2
Development projects (#)	48	32	32	18	-14
Maintenance projects (#)	25	30	30	25	-5

Distribution of change by object class

The object class detail for the decrease of $250,000 is as follows:

	FTE	Amount
Personnel compensation	2	$ 55,000
Personnel benefits		9,000
Other services		136,000
Supplies and materials		50,000
Total		$250,000

Activity Summary

Activity: Planning and Data Management

(Dollar amounts in thousands)

Subactivity	FY 1985 Actual	FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc (+) Dec. (-) from Base
Planning	48	183	175	183	183	---
Data Management	212	212	203	212	212	---
Total	260	395	378	395	395	---

Justification of Program and Performance

Activity: Planning and Data Management
Subactivity: Planning

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	183	175	183	183	---
(FTE-T)	(2)		(2)	(2)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Planning	183	-8	175

The impact of the P.L. 99-177 cancellation of $8,000 will be a slightly reduced level of plan maintenance.

Objectives

The objectives of the planning program in western Oregon are to:

- Develop land use plans which allocate land uses, timber resources, and other resources to meet the legal mandates of the O&C Act, FLPMA, and other applicable Federal laws, executive orders, policies, and National program priorities, including maximum consistency with State and local land use and resource management plans, programs, and policies;
- Adjust land use allocation and management direction through land use plan amendments to respond to new issues, problems or opportunities that arise between the regularly scheduled (10-year) plan revision cycles;
- Maintain existing land use plans and supporting inventories by incorporating available information from timber sales, ongoing environmental analyses, and public input; and
- Provide an effective and efficient forum for public input into management decisions to balance resource capabilities, National guidance, regional and local concerns.

FY 1987 program

The 1987 estimate is $183,000 and 2 FTE-T. Land use planning is an integral part of decadal recomputation of allowable timber harvest levels for western Oregon lands.

BLM planning regulations and policy require a full interdisciplinary team for the entire sequence of steps in the planning process. The composition of the team is determined by the District Manager after receiving public input on planning issues. The process usually requires skills and expertise in forestry, botany, wildlife, biology, soils science, hydrology, geology, recreation management, archaeology, public participation techniques, computer programming, and cartography. The District Managers and involved Area Managers are committed to the development of planning criteria, proposed alternatives, and selection of the preferred alternative(s). State office staff specialists provide guidance, quality reviews, and technical support. The State Director and appropriate State office staff specialists are involved in the selection of the preferred alternative, and the State Director must concur with the final planning decisions.

The existing generation of land use plans was completed in 1982. Workload in 1987 will be directed to maintenance of existing plans.

The following table displays the status of current western Oregon planning and environmental impact statement preparation:

Plan Name	Plan Status	Scheduled Resource Mgmt. Plans	EIS Status
Westside Salem*	MFP-completed 1979	Approximately 1990	Final 1981 (Timber)
Eastside Salem*	MFP-completed 1982	Approximately 1990	Final 1983 (Timber)
Eugene*	MFP-completed 1982	Approximately 1990	Final 1983 (Timber)
Roseburg*	MFP-completed 1982	Approximately 1990	Final 1983 (Timber)
Josephine	MFP-completed 1978	Combined Plan 1990	Final 1979 (Timber)
Jackson/Klamath	MFP-completed 1977	Combined Plan 1990	Final 1978 (Timber)
	Range Revision MFP-completed 1982		Final 1983 (Range)
Southcoast/Curry	MFP-completed 1979	Approximately 1990	Final 1981 (Timber)

* Indicates plans impacted by new O&C Timber Management Policy.

Justification of Program and Performance

Activity: Planning and Data Management
Subactivity: Data Management

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) From Base
$	212	203	212	212	---
(FTE-T)	(6)		(6)	(6)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 G.R. Cancellation	1986 Adjusted Approp.
Data Management	212	-9	203

The impact of the P.L. 99-177 cancellation of $9,000 will be the deferral of purchasing the lowest priority equipment. This will not significantly impact the overall program.

Objective

The objective of the data management program is to provide for the continued development and operation of an automated data information system in an effective and efficient manner to support the O&C management program in western Oregon.

FY 1987 program

The 1987 estimate is $212,000 and 6 FTE. Several data bases are being maintained in support of western Oregon resource management needs. The majority of these data bases relate directly to timber sales program actions.

Forest inventory and associated data are maintained and analyzed for trends in timber growth, yield, age and stocking, and are subsequently used to determine allowable cut levels for timber sales. Tree improvement data are maintained for BLM seed orchards including progeny plantations. Data are maintained for genetically superior trees, orchard clones, progeny test sites, seed inventory, and pollen inventory. These data are eventually used in decisions relating to reforestation of harvested commercial forest land. Inplace inventory data bases are maintained to identify forest changes and to track silvicultural treatments and accomplishments for both reforestation and intensive management practices.

Timber sale data are maintained to appraise the value of timber offered for sale. The data are continuously analyzed to predict sales values and changes in market conditions. The data provide monitoring of sales to small and large businesses for set-aside sales through Small Business Administration requirements. Active timber sale contract data are maintained for the purpose of predicting O&C receipts and payments to the counties under the O&C formula.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Oregon and California Grant Lands

Object Class	1987 Base FTE	1987 Base Amount	1987 Estimate FTE	1987 Estimate Amount	Inc. (+) and Dec. (-) FTE	Inc. (+) and Dec. (-) Amount
11 Personnel Compensation:						
11.1 Permanent positions - FTE-P	844	23,777	844	23,777	---	---
11.3 Positions other than permanent 1/	54	3,470	44	3,196	-10	-274
11.5 Other personnel compensation	---	425	---	425	---	---
Total personnel compensation	898	27,672	888	27,398	-10	-274
Other Objects						
12.1 Personnel benefits		4,428		4,385		-43
21.0 Travel and transportation of persons		651		625		-26
22.0 Transportation of things		2,449		2,265		-184
23.3 Communications, utilities, and miscellaneous charges		1,000		977		-23
24.0 Printing and reproduction		543		543		---
25.0 Other services		12,667		9,222		-3,445
26.0 Supplies and materials		6,892		6,469		-423
31.0 Equipment		1,924		1,860		-64
32.0 Lands and structures		1,500		1,500		---
42.0 Insurance claims and indemnities		---		---		---
Total Requirements		59,862		55,380		-4,482

1/ FTE-TOT = FTE-P (+) FTE-O

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OREGON AND CALIFORNIA GRANT LANDS
Program and Financing (in thousands of dollars)

14-1116-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Construction and acquisition......	528	528	528
00.02 Maintenance..........................	4,197	3,981	3,471
00.03 Renewable resources management...	50,942	50,873	46,766
00.04 Planning and data management.....	307	395	395
10.00 Total obligations..............	55,974	55,777	51,160
Financing:			
21.40 Unobligated balance available, start of year....................	-788	-1,753	-1,753
24.40 Unobligated balance available, end of year......................	1,753	1,753	1,753
39.00 Budget authority...............	56,939	55,777	51,160
Budget authority:			
40.00 Appropriation........................	53,939	56,114	51,160
40.30 Reduction pursuant to P.L. 98-473	---	-337	---
42.00 Transferred from other accounts..	3,000	---	---
43.00 Appropriation (adjusted).....	56,939	55,777	51,160
Relation of obligations to outlays:			
71.00 Obligations incurred, net.........	55,974	55,777	51,160
72.40 Obligated balance, start of year.	10,296	13,484	13,484
74.40 Obligated balance, end of year...	-13,484	-13,484	-13,484
90.00 Outlays........................	52,786	55,777	51,160

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OREGON AND CALIFORNIA GRANT LANDS
Object Classification (in thousands of dollars)

16-1116-0-1-302	19 85	19 86	19 87
BUREAU OF LAND MANAGEMENT			
Personnel compensation:			
11.1 Full-time permanent	23,570	23,650	23,405
11.3 Other than full-time permanent	2,304	2,305	2,285
11.5 Other personnel compensation	817	815	815
11.8 Special personal services payments	19	20	20
11.9 Total personnel compensation	26,710	26,790	26,525
12.1 Personnel benefits: Civilian	3,612	3,620	3,585
21.0 Travel and transportation of persons	529	500	500
22.0 Transportation of things	2,181	2,000	2,000
23.2 Rental payments to others	73	75	75
23.3 Communications, utilities, and miscellaneous charges	987	990	990
24.0 Printing and reproduction	216	200	200
25.0 Other services	16,496	16,202	11,885
26.0 Supplies and materials	2,947	3,000	3,000
31.0 Equipment	1,464	1,500	1,500
32.0 Lands and structures	14	500	500
42.0 Insurance claims and indemnities	37	---	---
99.0 Subtotal, Bureau of Land Management	55,266	55,377	50,760

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OREGON AND CALIFORNIA GRANT LANDS
Object Classification (in thousands of dollars)

Identification code 14-1116-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
ALLOCATION ACCOUNTS			
Personnel compensation:			
11.1 Full-time permanent	93	93	93
11.3 Other than full-time permanent	8	8	8
11.5 Other personnel compensation	3	3	3
11.9 Total personnel compensation	104	104	104
12.1 Personnel benefits: Civilian	11	11	11
21.0 Travel and transportation of persons	26	25	25
22.0 Transportation of things	13	10	10
23.3 Communications, utilities, and miscellaneous charges	9	10	10
24.0 Printing and reproduction	1	1	1
25.0 Other services	68	69	69
32.0 Lands and structures	476	170	170
99.0 Subtotal, allocation accounts	708	400	400
99.9 Total obligations	55,974	55,777	51,160
Obligations are distributed as follows:			
Interior--Bureau of Land Management	55,266	55,377	50,760
Transportation--Federal Highway Administration	708	400	400

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OREGON AND CALIFORNIA GRANT LANDS
Personnel Summary

Identification code 14-1116-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
BUREAU OF LAND MANAGEMENT			
Total number of full-time permanent positions	855	858	849
Total compensable workyears:			
Full-time equivalent employment	995	998	988
Full-time equivalent of overtime and holiday hours	22	22	22
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306
Average salary of ungraded positions	27,792	27,792	27,792
ALLOCATION ACCOUNTS			
Total number of full-time permanent positions	4	4	4
Total compensable workyears: Full-time equivalent employment	4	4	4
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306
Average salary of ungraded positions	27,792	27,792	27,792

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OREGON AND CALIFORNIA GRANT LANDS
(P.L. 99-177 Sequestration)
Program and Financing (in thousands of dollars)

Identification code 14-1116-6-1-302	19 85 actual	19 86 estimate	19 87 estimate
10.00 Total obligations..........	---	-2,398	---
40.00 Budget authority............	---	-2,398	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	---	-2,398	---
72.40 Obligated balance, start of year.	---	---	-623
74.40 Obligated balance, end of year..	---	-623	---
90.00 Outlays......................	---	-1,775	-623

Appropriation Summary Statement

Appropriation: Range Improvements

This appropriation is derived from grazing fees and certain mineral leasing receipts collected during the previous year. Fifty percent of the grazing fees from public lands and Bankhead-Jones Farm Tenant Act lands and mineral leasing receipts from the Farm Tenant Act lands are available for appropriation. When appropriated, these funds are used for the construction of physical improvements and for implementation of practices or treatments to rehabilitate, protect, or improve the public rangelands.

Section 6(b) of the Public Rangelands Improvement Act (PRIA) of 1978 (43 U.S.C. 1905(b)) in part reads as follows: "The second sentence of Section 401(b)(1) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1751(b)(1) is hereby amended by adding the words 'or $10,000,000 per annum, whichever is greater' after the words '50 per centum',..." This amendment provides that the Range Improvements appropriation will be 50 percent of the grazing receipts collected during the previous year or $10,000,000, whichever is greater. The Bureau is proposing that this $10,000,000 minimum level be eliminated for 1987.

PRIA also required the Forest Service and the Bureau of Land Management to prepare a study of the 7-year trial grazing fee formula and report the findings to Congress. The study has been completed in draft and is currently undergoing public review with the final report to be submitted in early 1986. It is assumed for the 1987 Budget that the grazing fee will continue at the current rate.

Appropriation Language Sheet

Range Improvements

For rehabilitation, protection, and acquisition of lands and interests therein, and improvement of Federal rangelands pursuant to section 401 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701), notwithstanding any other Act, sums equal to 50 per centum of all moneys received during the prior fiscal year under sections 3 and 15 of the Taylor Grazing Act (43 U.S.C. 315, et seq.), [but not less than $10,000,000 (43 U.S.C. 1901),] and the amount designated for range improvements from grazing fees and mineral leasing receipts from Bankhead-Jones lands transferred to the Department of the Interior pursuant to law, to remain available until expended: Provided, That not to exceed $600,000 shall be available for administrative expenses [: Provided further, That the dollar equivalent of value, in excess of the grazing fee established under law and paid to the United States Government, received by any permittee or lessee as compensation for an assignment of a grazing permit or lease, or any grazing privileges or rights thereunder, and in excess of the installation and maintenance cost of grazing improvements provided for by the permittee in the allotment management plan or amendments or otherwise approved by the Bureau of Land Management, shall be paid to the Bureau of Land Management and disposed of as provided for by section 401(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701): Provided further, That if the dollar value prescribed above is not paid to the Bureau of Land Management, the grazing permit or lease shall be canceled].

(7 U.S.C. 1010; 30 U.S.C. 355; 43 U.S.C. 1751, and 1901; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Justification of Proposed Language Changes

Range Improvements

1. Deletion: ["but not less than $10,000,000 (43 U.S.C. 1901),"]

For the last several years receipts from grazing fees have not exceeded the $10,000,000 minimum established in the Public Rangelands Improvement Act (PRIA). The Bureau believes that the funds provided for rangeland improvements should be directly tied to the grazing fee so that the Federal Treasury does not have to supplement the program at a time when every effort is being made to control the Federal deficit.

2. Deletion: [":Provided further, That the dollar equivalent of value, in excess of the grazing fee established under law and paid to the United States Government, received by any permittee or lessee as compensation for an assignment of a grazing permit or lease, or any grazing privileges or rights thereunder, and in excess of the installation and maintenance cost of grazing improvements provided for by the permittee in the allotment management plan or amendments or otherwise approved by the Bureau of Land Management, shall be paid to the Bureau of Land Management and disposed of as provided for by section 401(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701): Provided further, That if the dollar value prescribed above is not paid to the Bureau of Land Management, the grazing permit or lease shall be canceled"].

As written, the language potentially constrains legitimate transfers of grazing permits, such as sales and leases of base property. The condition which reads "for an assignment or other conveyance," arguably goes beyond the intent of the language, which was specifically aimed at illegal subleasing arrangements whereby the permittee profits directly through receipt of higher fees than paid to the United States. Although this problem could be solved by changing the language, we propose that the language be deleted in its entirety in the 1987 appropriations bill for the following reasons.

Regulations defining and controlling illegal subleasing of grazing permits were placed in effect in August 1985. These regulations provide penalties against violators by requiring the payment to the U.S. of those profits made through illegal subleasing arrangements, as provided for in the appropriations language. However, the regulations also include penalties under other authorities which call for trespass action against unauthorized third parties, and cancellation or reduction of grazing privileges for permittees who engage in illegal subleasing. Therefore, deletion of the language would only affect the penalty calling for payment of illegal subleasing profits to the U.S. This provision will be extremely difficult and cumbersome to enforce since there has been no prior history to establish legal and administrative procedures through which these profits can be determined and recovered. The remaining penalties (i.e., trespass, cancellation, reduction) are well-established procedures and will have the effect of deterring both the permittee and any third party from entering into illegal subleasing arrangements.

Appropriation Language Citations

Range Improvements

Appropriation language and citations:

1. "For rehabilitation, protection, acquisition of lands and interests therein, and improvement of Federal rangelands pursuant to section 401 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701),"

43 U.S.C. 1751

43 U.S.C. 1751 provides for moneys received by the United States as fees for grazing domestic livestock on public lands to be credited to a separate account in the Treasury and made available for the purpose of on-the-ground range rehabilitation, protection, and improvements, including, but not limited to, seeding and reseeding, fence construction, weed control, water development, and fish and wildlife habitat enhancement.

2. "Nothwithstanding any other Act, sums equal to fifty per centum of all moneys received during the prior fiscal year under sections 3 and 15 of the Taylor Grazing Act (43 U.S.C. 315, *et seq.*),"

43 U.S.C. 1751

43 U.S.C. 1751 provides that 50 per centum of all moneys received by the United States as fees for grazing domestic livestock on public lands under the Taylor Grazing Act (48 Stat. 1269; 43 U.S.C. 315, *et seq.*) and the Act of August 28, 1937 (50 Stat. 874; 43 U.S.C. 1181(d) and on lands in National Forests in the 11 contiguous Western States shall be credited to a separate account in the Treasury and made available for the purpose of on-the-ground range rehabilitation, protection, and improvements.

3. "but not less than $10,000,000 (43 U.S.C. 1901),"

43 U.S.C. 1901, 1905(b)

43 U.S.C. 1905(b) amends section 401(b)(1) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1751(b)(1)) by adding the words "or $10,000,000 per annum, whichever is greater" after the words "50 per centum."

4. "and the amount designated for range improvements from grazing fees and mineral leasing receipts from Bankhead-Jones lands transferred to the Department of the Interior pursuant to law,"

7 U.S.C. 1010
E.O. 10046; 10175; 10234; 10322; 10787;
10890,
30 U.S.C. 355

7 U.S.C. 1010 authorizes and directs the Secretary of Agriculture to develop a program of land conservation and land utilization in order to correct maladjustments in land use, and thus assist in controlling soil erosion, reforestation, preservation of natural resources, protecting fish and wildlife, developing and protecting recreational facilities, mitigating floods, preventing

impairment of dams and reservoirs, conserving surface and subsurface moisture, protecting the watersheds of navigable streams, and protecting the public lands, health, safety, and welfare, but not to build industrial parks or establish private industrial or commercial enterprises.

Executive Orders 10046, et al. provide that the jurisdiction of the Secretary of Agriculture under the provision of section 32 of the Bankhead-Jones Farm Tenant Act is transferred from the Department of Agriculture to the Department of the Interior for use, administration, or exchange under the applicable provisions of the Taylor Grazing Act.

30 U.S.C. 355 provides that all mineral leasing receipts derived from leases issued under the authority of the Mineral Leasing Act for Acquired Lands (August 7, 1947) shall be paid into the same funds or accounts in the Treasury and shall be distributed in the same manner as prescribed for other receipts from the lands affected by the lease, the intention being that this act shall not affect the distribution of receipts pursuant to legislation applicable to such lands.

5. "to remain available until expended: Provided, That not to exceed $600,000 shall be available for administrative expenses."

P.L. 99-190

P.L. 99-190, the FY 1986 Appropriations Act for the Department of the Interior and Related Agencies, provides that the appropriation shall remain available until expended and that a maximum of $600,000 is available from this appropriation for BLM administrative expenses.

There is no specific authorizing legislation.

Summary of Requirements

(Dollar Amounts in thousands)

Appropriation: Range Improvements	FTE-T	Amount	FTE-T	Amount
Appropriation currently available, 1986			119	10,000
P.L. 99-177 Budget Authority Cancellation			—	-630
Adjusted Appropriation, 1986			119	9,370
Adjustments to Base:				
Adjustment for 1986 impact of P.L. 99-177		+630		
Total Adjustments to Base			—	+630
1987 Base Budget			119	10,000
Program Changes (Changes to Base Budget, detailed below)			-3	-1,494
Total Requirements (1987 Estimate)			116	8,506

Comparison by activity	1985 Actual FTE-T	1985 Actual Amount	1986 Enacted to Date FTE-T	1986 Enacted to Date Amount	PL 99-177 Reduction	1986 Adjusted Approp.	1987 Base FTE-T	1987 Base Amount	1987 Estimate FTE-T	1987 Estimate Amount	Inc(+)/Dec(-) from 1986 Appropriation FTE-T	Inc(+)/Dec(-) from 1986 Appropriation Amount	Inc(+)/Dec(-) from 1986 Adjusted Approp.	Inc(+)/Dec(-) from 1987 Base FTE-T	Inc(+)/Dec(-) from 1987 Base Amount
Improvements to Public Lands	98	8,000	103	8,000	-544	7,456	103	8,000	100	6,956	-3	-1,044	-500	-3	-1,044
Farm Tenant Act Lands	16	1,400	16	1,400	-60	1,340	16	1,400	16	950	0	-450	-390	0	-450
Administrative Expenses	0	600	0	600	-26	574	0	600	0	600	0	0	26	0	0
Total Requirements	114	10,000	119	10,000	-630	9,370	119	10,000	116	8,506	-3	-1,494	-864	-3	-1,494

Justification of Base Adjustments

Range Improvements

	FTE	Amount ($000)
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellations	---	[illegible]

The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177) requires a 4.3 percent reduction in non-exempt programs in FY 1986. Since the 4.3 percent reduction applies to FY 1986 only, this adjustment is made to allow a more comparable basis for showing program changes from FY 1986 to FY 1987.

BLM

Justification of Program and Performance

Appropriation: Range Improvements

(Dollar amounts in thousands)

Activity 1/		1986 Enacted to Date	1986 [illegible]	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Improvements to Public Lands	$	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	(FTE)	[illegible]		[illegible]	[illegible]	[illegible]
Range [illegible]	$	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	(FTE)	[illegible]		[illegible]	[illegible]	[illegible]
Administrative Expenses	$	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	(FTE)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Requirements	$	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	(FTE)	[illegible]		[illegible]	[illegible]	[illegible]

Impact of Public Law 99-177

	1986 Enacted to Date	P.L. 99-177 [illegible]	1986 [illegible]
Range Improvements	[illegible]	[illegible]	[illegible]

[illegible]

Authorization

[illegible]	[illegible]

1/ [illegible]

	Use of the appropriation is limited to on-the-ground rehabilitation, protection, and improvement of grazing lands. The policy is to fund project survey, design, and construction from this appropriation. Maintenance, environmental analysis, removal of excess wild horses and burros, and administrative activities such as issuing improvement permits are funded in the grazing management or other appropriate program elements in the "Management of Lands and Resources" appropriation.
30 U.S.C. 355	The Mineral Leasing Act for Acquired Lands of 1947 provides that "all receipts derived from leases issued under the authority of this chapter shall be paid into the same funds or accounts in the Treasury and shall be distributed in the same manner as prescribed for other receipts from the lands affected by the lease, the intent of this provision being that this chapter shall not affect the distribution of receipts pursuant to legislation applicable to such lands...."
43 U.S.C. 315 P.L. 73-482	The Taylor Grazing Act of 1934, as amended, provides for active management of public rangelands including regulation of livestock grazing and improvement of the productive capability of the public range.
43 U.S.C. 1901, 1905 P.L. 95-514	The Public Rangelands Improvement Act of 1978 provides for improving the condition of the public rangelands and provides for an appropriation of $10,000,000 per annum or 50 per centum of all moneys received as fees for grazing, whichever is greater, notwithstanding the level of grazing fees collected.
7 U.S.C. 1010, 1012-1013A P.L. 75-210	The Farm Tenant Act of 1937 ("Bankhead-Jones Act") provides for management of acquired farm tenant lands and construction and maintenance of range improvements.

Objective

The objective of the Range Improvements appropriation is to improve public rangeland productivity for resultant benefits to livestock, wildlife, and watershed protection, through the following activities:

- Construction and development of improvements specifically called for in existing activity plans for protection or improvement of rangeland conditions;
- Initiating on-the-ground improvements called for in new activity plans; and
- Construction and development of range improvement projects to prevent resource damage or relieve conflicts in resource use.

Base program

Base funding for Range Improvements is $10,000,000 and 119 FTE. Range improvements such as fences, water developments, seedings, weed control and vegetation treatment contribute to effective range management and are being used successfully to improve the soil, water and vegetative condition of the Nation's rangelands.

FLPMA directs that one-half of the Range Improvements appropriation must be returned for use in the districts from which the fees were collected; the other half may be used for rangeland improvement practices as the Secretary directs. Current policy provides that all of the appropriation will be distributed for use in the districts from which the fees were collected in the same proportion as collections received.

These funds are used exclusively for on-the-ground improvements and directly related project costs. This allows for the maximum amount of improvement work to be accomplished with available funds. Most of the work is accomplished through contracts with some being done in-house where capability exists and factors such as cost effectiveness and expediency are favorable.

Land-use planning, including activity plans, provides the basis for determining needed improvements. These plans are subsequently analyzed to determine the costs and benefits of improvements and determine appropriate schedules for construction/development. After the preliminary work is accomplished using other activity funding, Range Improvements funds are then directed to the projects necessary for implementation.

Rangeland users are encouraged to participate in rangeland improvement by contributing funds or directly funding improvements identified through coordinated and cooperative management. Under current policy, the Range Improvements appropriation is not used for maintenance. The individual, group, or association deriving the primary benefit(s) from a structural improvement is responsible for maintaining that improvement. Thus, livestock operators are responsible for the maintenance of those structural improvements primarily benefiting their livestock operations. Maintenance for which BLM retains responsibility, such as nonstructural improvements, is funded from the grazing management program in the "Management of Lands and Resources" appropriation. This policy allows for a greater proportion of the Range Improvements appropriation to be used for on-the-ground improvements that have proven successful in increasing the productivity of the rangelands.

The noxious weed control program is a cooperative effort between BLM, State and local agencies. The control of noxious weeds at 132 sites on public lands is another aspect of this program.

Decrease from 1987 Base

(dollars in thousands)

		1987 Base	1987 Estimate	Difference
Improvements to Public	$	8,000	6,956	-1,044
Lands	(FTE)	(103)	(98)	(-5)
Farm Tenant Act	$	1,400	950	-450
Lands	(FTE)	(16)	(16)	(---)
Administrative	$	600	600	---
Expenses	(FTE)	(---)	(---)	(---)
	$	10,000	8,506	-1,497
Total	(FTE)	(119)	(114)	(-5)

The decrease of $1,497,000 and 5 FTE is the result of sharing 50 percent of anticipated receipts without providing supplemental funding to reach the 1987 base level of $10 million. The 1987 Estimate for grazing management in the MLR appropriation reflects a decrease in activity plan preparation. This decreases the immediate need for improvement work that would be associated with these plans; thus, range improvement projects can be decreased. Additionally, weed control efforts have been deferred pending completion of the environmental impact statement on certain aspects of this program. It is anticipated that this will result in no treatment on 5 of the 132 sites this year.

The following table displays the actual workload accomplishments for 1985 and estimates for 1986 and 1987.

Workload Measure	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-) from Base
Structural developments (#)	1,460	1,350	1,350	1,300	-50
Land/vegetative treatment (acres)	85,765	130,000	130,000	120,000	-10,000
Weed control projects (#)	47	112	132	127	-5

Distribution of change by object class

The object class detail for the $1,497,000 decrease is as follows:

	FTE	Amount
Personnel compensation	5	$ 136,500
Personnel benefits		21,800
Travel and transportation of persons		25,000
Transportation of things		75,000
Other services		250,000
Supplies and materials		250,000
Lands and structures		738,700
Total		$1,497,000

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Range Improvements

		1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
		FTE	Amount	FTE	Amount	FTE	Amount
Object Class							
11.	Personnel Compensation:						
11.1	Full-time permanent	113	3,086	108	2,950	-5	-136
11.3	Other than full-time permanent	6	164	6	164	---	---
11.5	Other personnel compensation	---	100	---	100	---	---
	Total personnel compensation	119	3,350	114	3,214	-5	-136
	Other Objects						
12.1	Personnel benefits		536		514		-22
21.0	Travel and transportation of persons		150		125		-25
22.0	Transportation of things		700		625		-75
23.3	Communications, utilities, and miscellaneous charges		15		15		---
25.0	Other services		1,331		1,081		-250
26.0	Supplies and materials		1,800		1,550		-250
31.0	Equipment		55		55		---
32.0	Lands and structures		2,063		1,324		-739
	Total requirements		10,000		8,503		-1,497

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RANGE IMPROVEMENTS
Amounts Available for Appropriation (in thousands of dollars)

Identification code	19 85 actual	19 86 estimate	19 87 estimate
Unappropriated balance, start of year...	5,987	5,940	5,383
Collections (including offsetting receipts)...........................	16,640	17,013	17,012
Transferred to general fund receipts....	-5,150	-6,110	-5,299
Transferred to payments to States from grazing receipts, etc., public lands outside grazing districts............	-1,024	-1,000	-1,024
Transferred to payments to States from grazing receipts, etc., public lands within grazing districts.............	-1,550	-1,520	-1,558
Transferred to payments to counties from grazing and mineral leasing receipts from National Grasslands.....	-500	-620	-625
Total available for appropriation.......	14,403	13,703	13,889
Appropriation..........................	-8,463	-8,320	-8,506
Unappropriated balance, end of year.....	5,940	5,383	5,383
(Memo cnt. 31.5)	(Memo cnt. 8)	(Memo cnt. 5)	(Memo cnt. 6.5)

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RANGE IMPROVEMENTS

Program and Financing (in thousands of dollars)

Identification code 14-5132-0-2-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Improvements to public lands.....	7,559	8,000	6,956
00.02 Farm tenant act lands...........	1,035	1,400	950
00.03 Administrative expenses.........	600	600	600
10.00 Total obligations...........	9,194	10,000	8,506
Financing:			
21.40 Unobligated balance available, start of year.................	-1,816	-2,622	-2,622
24.40 Unobligated balance available, end of year...................	2,622	2,622	2,622
39.00 Budget authority............	10,000	10,000	8,506
Budget authority:			
40.00 Appropriation (indefinite, special fund).................	8,463	8,320	8,506
40.00 Appropriation (definite general fund).................	1,537	1,680	---
43.00 Appropriation (adjusted).....	10,000	10,000	8,506
Relation of obligations to outlays:			
71.00 Obligations incurred, net.......	9,194	10,000	8,506
72.40 Obligated balance, start of year.	3,683	2,605	2,605
74.40 Obligated balance, end of year..	-2,605	-2,605	-2,605
90.00 Outlays.....................	10,273	10,000	8,506
(Memo col: 31.5)	(Memo col: [illegible])	(Memo col: [illegible])	(Memo col: [illegible])

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RANGE IMPROVEMENTS
Object Classification (in thousands of dollars)

Identification code 14-5132-0-2-302		19 85 actual	19 86 estimate	19 87 estimate
	Personnel compensation:			
11.1	Full-time permanent............	2,531	2,635	2,530
11.3	Other than full-time permanent.	320	337	320
11.5	Other personnel compensation....	81	80	80
11.8	Special personal services payments	2	---	---
11.9	Total personnel compensation.	2,934	3,052	2,930
12.1	Personnel benefits: Civilian....	366	380	365
21.0	Travel and transportation of persons........................	124	125	125
22.0	Transportation of things..........	642	660	660
23.3	Communications, utilities, and miscellaneous charges..........	14	15	15
24.0	Printing and reproduction........	1	1	1
25.0	Other services....................	1,172	1,250	1,100
26.0	Supplies and materials...........	1,810	2,000	1,600
31.0	Equipment.........................	55	100	100
32.0	Lands and structures.............	2,076	2,417	1,610
99.9	Total obligations............	9,194	10,000	8,506
(Mono cast: 21.8)		(Mono cast: 8)	(Mono cast: 8)	(Mono cast: 4.8)

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RANGE IMPROVEMENTS
Personnel Summary

Identification code 14-5132-0-2-302	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	95	99	95
Total compensable workyears:			
Full-time equivalent employment	114	119	114
Full-time equivalent of overtime and holiday hours	3	3	3
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	26,306
(Memo cust: 21.5)	(Memo cust: 8)	(Memo cust: 8)	(Memo cust: 4.8)

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Case 316

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RANGE IMPROVEMENTS
(P.L. 99-177 Sequestration)
Program and Financing (in thousands of dollars)

Identification code 14-5132-6-2-302	19 85 actual	19 86 estimate	19 87 estimate
10.00 Total obligations	---	-430	---
40.00 Budget authority	---	-430	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net	---	-430	---
72.40 Obligated balance, start of year	---	---	-167
74.40 Obligated balance, end of year	---	167	---
90.00 Outlays	---	-263	-167
(Mono unit: 21.8)	(Mono unit: 3)	(Mono unit: 3)	(Mono unit: 4.8)

Appropriation Summary Statement

Appropriation: Special Acquisition of Lands and Minerals

This appropriation was established to account for the issuance and use of monetary credits or bidding rights authorized by Congress for acquisition of non-Federal interests in the Rattlesnake National Recreation Area (NRA) and Wilderness Area, and for other transactions involving monetary credits specifically authorized and directed by an Act of Congress.

The major activity covered by this account is:

> Rattlesnake NRA and Wilderness Area. Represents the monetary value of bidding rights accrued from interest adjustments to the initial bidding rights issued under the authority of P.L. 96-466 as amended by section 7 of the Lee Metcalf Wilderness and Management Act of 1983. The bidding rights may be used as monetary credits against that portion of bonus payments, rentals or royalty payments paid under the Mineral Leasing Act of 1920 as amended, into the Treasury of the U.S. and retained by the Federal Government on any Federal coal lease won or otherwise held by the holder. The value of unused bidding rights increases at a rate set quarterly by the Secretary of the Treasury, pursuant to section 11 of the Debt Collection Act of 1982 (31 U.S.C. 3717). This is permanent authority not requiring current congressional action.

Appropriation Language Sheet

Special Acquisition of Lands and Minerals

(Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Justification of Program and Performance

Activity: Rattlesnake NRA and Wilderness Area

(Dollar amounts in thousands)

		1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
(Permanent Authority	$	1,300	1,300	1,300	1,300	---
to Borrow)	(FTE-T)	(---)		(---)	(---)	(---)

Impact of Public Law 99-177

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Rattlesnake NRA and Wilderness Area	1,300	---	1,300

The 1986 amount is only interest accrued to unexercised bidding rights issued in 1983. It represents permanent authority to borrow and is not affected by P.L. 99-177.

Authorization

P.L. 97-476 16 U.S.C. 460 11-3	The Rattlesnake Recreation Area and Wilderness Act of 1980. Section 4 of the Act authorized the Secretary of the Interior to accept title to private lands within the Rattlesnake Recreation Area and Rattlesnake Wilderness Area in exchange for bidding rights equal to the fair market value of such lands.
P.L. 98-140 16 U.S.C. 460 11-3	Section 7 of the Lee Metcalf Wilderness and Management Act of 1983 amended P.L. 96-476 to provide that the bidding rights may be used as a monetary credit, which shall be considered "money" within the meaning of section 35 of the Mineral Leasing Act of 1920, against the Federal portion of bonus payments, rental or royalty payments for Federal coal leases, and that the Secretary shall consummate the exchange of lands owned by Montana Power Company within the area by issuing bidding rights equal to the negotiated cash equivalent of the fair market value of such Montana Power Company lands.

Objective

The objective of this program is to account for the monetary equivalent of bidding rights issued and adjustments to the value of such rights for the Rattlesnake National Recreation Area (NRA) and Wilderness Area in Montana.

FY 1987 program

On November 19, 1983, pursuant to the statutory authority cited above, BLM issued bidding rights equal to $14,300,000 to the Montana Power Company for its rights within the Rattlesnake NRA and Wilderness Area in the State of Montana.

The certificate of bidding rights provided that the bidding rights granted may [illegible] used as monetary credits of no more than 50 percent of that portion of bonus payments, rentals, or royalty payments paid under the Mineral Lands Leasing Act of 1920, as amended (31 U.S.C. 191), into the Treasury of the United States and retained by the Federal Government on any Federal coal lease won or otherwise held by the Montana Power Company, its successors and assigns, with the balance to be paid in cash. The cash is to be applied to the State's 50 percent share of these payments.

To exercise these bidding rights, the certificate holder shall notify the appropriate office of the Minerals Management Service (MMS) or the appropriate State Office of the Bureau of Land Management, by submitting a Bidding Rights Use Notice.

The value of bidding rights will increase at a rate set quarterly by the Secretary of the Treasury and published in the Federal Register, pursuant to section 11 of the Debt Collection Act of 1982 (31 U.S.C. 3717). Interest will be compounded quarterly and computed on the average daily balance of the bidding rights plus accrued interest during each calendar quarter.

All rights granted shall continue until fully used, or if not fully used, no later than November 1, 1995, unless the eligibility period is extended. The eligibility period may be extended for the period of time that force majeure has prevented the use of these rights.

Bidding rights may be assigned to any entity in minimum amounts of $100,000.

The 1987 amount represents only additional adjustments to unexercised bidding rights at current Treasury rates. It is permanent authority to borrow, requiring no current congressional action.

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SPECIAL ACQUISITION OF LANDS AND MINERALS
Program and Financing (in thousands of dollars)

Identification code 14-1117-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Rattlesnake NRA and Wilderness Area	4,195	1,300	1,300
00.02 Cranberry Wilderness Area	14,700	---	---
10.00 Total obligations	18,896	1,300	1,300
Financing:			
21.47 Unobligated balance available, start of year	-1,154	---	---
39.00 Budget authority	17,742	1,300	1,300
Budget authority:			
40.00 Appropriation	14,700	---	---
67.10 Authority to borrow (Public Law 96-476, as amended)	3,042	1,300	1,300
Relation of obligations to outlays:			
71.00 Obligations incurred, net	18,896	1,300	1,300
90.00 Outlays	18,896	1,300	1,300
(Memo col: 21.5)	(Memo col: 5)	(Memo col: 5)	(Memo col: 4.5)

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SPECIAL ACQUISITION OF LANDS AND MINERALS
Object Classification (in thousands of dollars)

Identification code 14-1117-0-1-302	19 85 actual	19 86 estimate	19 87 estimate
32.0 Lands and structures.............	14,700	---	---
43.0 Interest and dividends...........	4,195	1,300	1,300
99.9 Total obligations............	18,896	1,300	1,300
(Memo cost: 21.8)	(Memo cost: 8)	(Memo cost: 8)	(Memo cost: 4.8)

Appropriation Summary Statement

Appropriation: Recreation Development and Operation of Recreation Facilities

Recreation user fees collected by the Bureau of Land Management (BLM) are presently deposited in the Land and Water Conrervation Fund. The estimated amount of fees collected in 1987 is $1,000,000.

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
RECREATION DEVELOPMENT AND OPERATION OF RECREATION FACILITIES
Program and Financing (in thousands of dollars)

Identification code 14-5011-0-2-302	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations (object class 25.0)	1	---	---
Financing:			
21.40 Unobligated balance available, start of year..................	-20	-19	-19
24.40 Unobligated balance available, end of year....................	19	19	19
39.00 Budget authority.............	---	---	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	1	---	---
90.00 Outlays......................	1	---	---
(Memo cast: 21.8)	(Memo cast: 8)	(Memo cast: 8)	(Memo cast: 4.8)

Appropriation Summary Statement

Appropriation: Service Charges, Deposits, and Forfeitures

This appropriation finances BLM's costs of performing specific applicant-initiated actions from deposits or service charges collected from the applicant and making these funds available for use by BLM. The account, as established pursuant to the Federal Land Policy and Management Act (FLPMA) of 1976, provides some management flexibility in responding to externally-initiated applications and ensures the immediate availability of funds for public-demand work such as rights-of-way processing. This flexibility and fund availability is particularly important given the unpredictability of the timing and location of rights-of-way applications, which make up a major program in this appropriation.

Funds are expected to be deposited for processing applications and monitoring construction and operations for about 75 major rights-of-way projects including the Trans-Alaska pipeline, other oil and gas pipelines, electric and other transmission lines, power plants, and water delivery systems. Processing costs of small rights-of-way (R/W) projects estimated to cost less than $5,000 to process are provided to this appropriation through a fee schedule.

In addition to rights-of-way processing, this appropriation also finances certain costs for miscellaneous cost recoverable realty cases, repair of damaged lands, and BLM's Adopt-a-Horse Program.

Appropriation Language Sheet

Service Charges, Deposits, and Forfeitures

For administrative expenses and other costs related to processing application documents and other authorizations for use and disposal of public lands and resources, for monitoring construction, operation, and termination of facilities in conjunction with use authorizations, and for rehabilitation of damaged property, such amounts as may be collected under sections 209(b), 304(a), 304(b), 305(a) and 504(g) of the Act approved October 21, 1976 (43 U.S.C. 1701), and sections 101 and 203 of Public Law 93-153, to be immediately available until expended.

(43 U.S.C. 1719, 1734, 1735, and 1764; 30 U.S.C. 185; 87 Stat. 584; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190).

Appropriation Language Citations

Bureau of Land Management

Appropriation: Service Charges, Deposits, and Forfeitures

1. "For administrative expenses and other costs related to processing application documents and other authorizations for use and disposal of public lands and resources, for monitoring construction, operation, and termination of facilities in conjunction with use authorizations, and for rehabilitation of damaged property such amounts as may be collected under sections 209(b), 304(a), 304(b), 305(a) and 504(g) of the Act approved October 21, 1976 (43 U.S.C. 1701), and sections 101 and 203 of Public Law 93-153, to be immediately available until expended."

43 U.S.C. 1719(c)
43 U.S.C. 1734(a)
43 U.S.C. 1734(b)
43 U.S.C. 1735(a)
43 U.S.C. 1764(g)
and
P.L. 93-153 Sec. 101
P.L. 93-153 Sec. 203

43 U.S.C. 1719(c) (FLPMA Section 209(b)) provides for conveyance of mineral interests upon payment of administrative costs and that the "moneys paid . . . for Administrative costs . . . shall be paid to the agency which rendered the service and deposited to the appropriation then current."

43 U.S.C. 1734(a) (FLPMA Section 304(a)) provides that "the Secretary may establish reasonable filing and service fees and reasonable charges, and commissions with respect to applications and other documents relating to the public lands . . . ."

43 U.S.C. 1734(b) (FLPMA Section 304(b)) provides that "the Secretary is authorized to require a deposit of any payments intended to reimburse the United States for reasonable costs with respect to applications and other documents relating to such lands. The moneys . . . shall be deposited with the Treasury in a special account and are hereby authorized to be appropriated and made available until expended."

43 U.S.C. 1735(a) (FLPMA Section 305(a)) states that "...any money received by the United States as a result of the forfeiture of a bond or other security by a resource developer or purchaser or permittee who does not fulfill the requirements of his contract or permit or does not comply with the regulations of the Secretary; . . . or in contract involving present or potential damage to the public lands shall be credited to a separate account in the Treasury and are hereby authorized to be appropriated and made available until expended..."

43 U.S.C. 1764(g) (FLPMA Section 504(g)) provides for payment of rental fees for rights-of-way and for reimbursement of all reasonable administrative and other costs incurred in processing an application for a right-of-way and in inspection and monitoring of construction, operation, and termination of the facility pursuant to the right-of-way.

43 U.S.C. 1737 (FLPMA Section 307(c)) provides that "the Secretary may accept contributions or donations of money, services, and property, real, personal, or mixed, for the management, protection, development, acquisition, and conveying of the public lands, including the acquisition of rights-of-way for such purposes . . . . Moneys received hereunder shall be credited to a separate account in the Treasury and are hereby authorized to be appropriated and made available until expended, as the Secretary may direct, for payment of expenses incident to the function toward the administration of which the contributions were made and for refunds to depositors of amounts contributed by them in specific instances where contributions are in excess of their share of the cost."

Summary of Requirements

(Dollar amounts in thousands)

Appropriation: Service Charges, Deposits, and Forfeitures (Indefinite)	FTE-T	Amount	FTE-T	Amount
Appropriation currently available, 1986			57	4,247
P.L. 99-177 Budget Authority Cancellation			—	--- 1/
Adjusted Appropriation, 1986			57	4,247
Adjustments to Base:				
Adjustment for 1986 impact of P.L. 99-177				
Total, Adjustments to Base			—	---
1987 Base Budget			57	4,247
Program Changes (Changes to Base budget, detailed below)			---	+948
Total Requirements (1987 Estimate)			57	5,195

Comparison by activity	1985 Actual FTE-T	1985 Actual Amount	1986 Enacted to Date FTE-T	1986 Enacted to Date Amount	PL 99-177 Reduction	1986 Adjusted Appropriation	1987 Base FTE-T	1987 Base Amount	1987 Estimate 2/ FTE-T	1987 Estimate 2/ Amount	Inc(+)/Dec(-) from 1986 Appropriation FTE-T	Inc(+)/Dec(-) from 1986 Appropriation Amount	Inc(+)/Dec(-) from 1986 Adjusted Approp.	Inc(+)/Dec(-) from 1987 Base FTE-T	Inc(+)/Dec(-) from 1987 Base Amount
Rights-of-Way Processing	39	2,488	39	1,690	---	1,690	39	1,690	39	2,695	---	+1,005	+1,005	---	+1,005
Adopt-a-Horse Program	---	677	---	865	---	865	---	865	---	500	---	-365	-365	---	-365
Repair of Damaged Lands	10	1,715	10	1,342	---	1,342	10	1,342	10	1,650	---	+308	+308	---	+308
Cost Recoverable Realty Cases	8	350	8	350	---	350	8	350	8	350	---	---	---	---	---
Total Requirements	57	5,230	57	4,247	---	4,247	57	4,247	57	5,195	---	+948	+948	---	+948

[1/] In addition to permanent cancellation of budget authority in some appropriations, P.L. 99-177 sequesters $127,000 of spending authority in this special account.

[2/] Budget authority for this account is an indefinite appropriation; the estimate of the appropriation is based on anticipated receipts from deposits, forfeitures, cost reimbursements, and performance bonds.

Justification of Program and Performance

Appropriation: Service Charges, Deposits and Forfeitures
Activity: Rights-of-Way Processing

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	1,690	1,690	1,690	2,695	+1,005
(FTE-T)	(39)		(39)	(39)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Rights-of-Way Processing	1,690	---	1,690

P.L. 99-177 does not cancel budget authority for activities in this appropriation. However, the law does provide for a cancellation of $51,000 in spending authority for rights-of-way processing. Because funding for this appropriation is a direct result of payments by the public for services provided, the impact of this cancellation will be that additional costs will be borne by the rights-of-way program of the Management of Lands and Resources (MLR) appropriation resulting in a further reduction of capability in that program to complete planned units of accomplishment.

Authorization

43 U.S.C. 1734, 1764 P.L. 94-579	The Federal Land Policy and Management Act of 1976 authorizes collection of service charges and deposits to finance the costs of certain right-of-way application and permitting activities.
30 U.S.C. 18 P.L. 93-153	The Trans-Alaska Pipeline Act of 1973 (Section 101) amended the Mineral Leasing Act of 1920 to authorize rights-of-ways for oil, gas, and other fuels. It further authorized the Secretary to issue rights-of-way and other land use authorizations related to the Trans-Alaska Pipeline. Rights-of-way applicants and permittees are to reimburse the United States for all costs associated with processing applications and monitoring pipeline construction and operations.
15 U.S.C. 719 P.L. 92-195	The Alaska Natural Gas Transportation Act of 1976 authorizes the granting of certificates, rights-of-way permits, and leases.

42 U.S.C. 4321 (4331-4335, 4341-4347) P.L. 91-190	The National Environmental Policy Act of 1969 requires preparation of environmental impact statements for Federal projects that may have a significant effect on the environment.

Objectives

The objectives of this activity are as follows:

- o Facilitate production and transportation of domestic energy resources; and
- o Expedite the granting of all rights-of-way (R/W's) by processing applications, issuing permits, and monitoring construction involved with the operation and termination of cost recoverable R/W's over public lands (as authorized by the Federal Land Policy and Management Act of 1976 and the 1973 amendment to the Mineral Leasing Act of 1920).

Base program

The Bureau's total rights-of-way program effort is funded through a combination of applicant deposits made to this indefinite appropriation and the directly appropriated funds in the Management of Lands and Resources (MLR) appropriation. A more complete description of the relationships between these funding sources and the total R/W program is given in the realty operations subactivity portion of the MLR account.

The 1987 Base funding level for reimbursable rights-of-way processing is $1,690,000 and 39 FTE.

Financing is obtained from deposits of funds made in advance of Bureau work by applicants and grant holders. Only those costs incurred as a direct result of the filing of an application or the issuance of a R/W grant and which facilitate processing, monitoring or termination of such are charged against the individual project.

Increase from 1987 Base

	1987 Base	1987 Estimate	Difference
$	1,690	2,695	+1,005
(FTE)	(39)	(39)	(---)

The projected increase from the 1987 Base is a reflection of anticipated increases in receipts. This revised estimate is derived from more recent collection experience, an anticipated increase in both the number of and average cost for large R/W cases, and the expectation that new cost recovery regulations will be in place for cases processed under both MLA and FLPMA.

The new regulations establish a fee schedule which more completely covers the reimbursement of full costs for minor or smaller types of R/W's applied for under both FLPMA and MLA authority, and outline more precisely the effects on cost reimbursement funding of the reasonableness criteria stated in FLPMA.

Implementation of these changes will permit a larger portion of the processing costs of R/W cases to be funded through the "Service Charges, Deposits, and Forfeitures" appropriation. In 1987, Bureau work effort on approximately 3,075 cases will be funded either fully or partially by reimbursement from the applicant. These remaining cases are those which are not cost reimbursable by statutory provision; and these are funded fully through the MLR appropriation. Only a portion of processing costs for the FLPMA cases will be recoverable under the new regulations due to the reasonableness criteria contained in FLPMA. The non-recoverable portion of BLM's processing costs will also be funded by the MLR appropriation.

Distribution of change by object class

The object class detail for the proposed increase of $1,005,000 is as follows:

Travel and transportation of persons	$ 50,000
Transportation of things	100,000
Communications, utilities and miscellaneous charges	10,000
Printing and reproduction	10,000
Other services	835,000
Total	$1,005,000

Justification of Program and Performance

Appropriation: Service Charges, Deposits and Forfeitures
Activity: Adopt-a-Horse Program

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	865	865	865	500	-365
(FTE-T)	(---)		(---)	(---)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Adopt-a-Horse Program	865	---	865

P.L. 99-177 does not cancel budget authority for activities in this appropriation. However, the law does provide for a cancellation of $26,000 in spending authority for the adopt-a-horse program. Because funding for this appropriation is a direct result of payments by the public for services provided, the impact of a reduction of $26,000 will be that additional costs will be borne by the wild horse and burro program of the MLR appropriation resulting in decreased capability to accomplish planned units of work.

Authorization

43 U.S.C. 1732, 1734 P.L. 94-579	The Federal Land Policy and Management Act (FLPMA) of 1976 authorizes collection of service charges to finance the costs of certain applicant activities.
16 U.S.C. 1331-1340 P.L. 92-195	The Wild Free-Roaming Horse and Burro Act of 1971, as amended by the Public Rangelands Rangelands Improvement Act (PRIA) of 1978, P.L. 95-514, authorizes "adoption" of wild horses and burros by private individuals under cooperative agreements with the government.
43 U.S.C. 1901 et seq. P.L. 95-514	The Public Rangelands Improvement Act (PRIA) of 1978 establishes the policy of improving the Federal rangeland conditions and facilitates the humane adoption or disposal of excess wild free-roaming horses and burros.

Objectives

The objectives of the Adopt-a-Horse Program are to:

- Provide for the adoption of excess wild horses and burros by qualified private parties under cooperative agreements; and
- Recover a part of the associated veterinary, transportation, and animal maintenance costs from persons adopting the animals.

Base program

The 1987 Base funding level for the Adopt-a-Horse program is $865,000.

BLM charges standard fees for the adoption of wild horses and burros to partially offset costs of operating the adoption program. These fees are deposited into this account, are immediately appropriated, and become available for use by BLM to conduct the program.

Standard adoption fees paid to BLM by adopters of wild horses and burros are set at $125 per horse and $75 per burro. The use of these funds will partially offset BLM's costs to: transport the excess animals from the capture site to a facility where they are prepared for adoption; provide necessary veterinary treatment and vaccinations; feed and handle the animals prior to adoption; process adoption applications; screen the qualifications of potential adopters; and contract for the operation of fixed and temporary adoption centers by private contractors.

It is anticipated that approximately 9,350 animals will be adopted in 1986 and 13,500 in 1987.

Decrease from 1987 Base

(dollars in thousands)

	1987 Base	1987 Estimate	Difference
$	865	500	-365
(FTE)	(---)	(---)	(---)

The projected decrease from the 1987 Base reflects an anticipated decrease in receipts. Emergency rulemaking published in May 1984 authorized the BLM Director to waive or adjust the current adoption fee for animals not considered adoptable under the existing fees. This rule was successful in promoting the adoption of over 2,900 such animals in 1985 with a slightly higher number anticipated in 1986. However, the proportion of these types of animals is expected to significantly increase each year. This will result in increased use of the fee waiver option to meet adoption goals. This is the primary reason for the receipt reduction of $365,000 projected for 1987.

Distribution of change by object class

The object class detail for the proposed decrease of $365,000 is as follows:

	Amount
Transportation of things	$100,000
Other services	265,000
Total	$365,000

Justification of Program and Performance

Appropriation: Service Charges, Deposits and Forfeitures
Activity: Repair of Damaged Lands

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	1,342	1,342	1,342	1,650	+308
(FTE-T)	(10)		(10)	(10)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Repair of Damaged Lands	1,342	---	1,342

P.L. 99-177 does not cancel budget authority for activities in this appropriation. However, the law provides for a cancellation of $40,000 in spending authority for the repair of damaged lands activity. The nature of this indefinite appropriation will make it necessary, as a result of this cancellation, to defer work on repair of damaged lands which is financed through deposits and forfeitures of performance bonds from commercial users of the public lands.

Authorization

43 U.S.C. 1735 P.L. 94-579	The Federal Land Policy and Management Act of 1976, (Section 305) authorizes collection for damages, forfeiture of performance bonds, and receipts of deposits to finance the costs of certain land restoration activities.
42 U.S.C. 4321 (4331-4335, 4341-4347) P.L. 91-190	The National Environmental Policy Act of 1969 requires preparation of environmental impact statements for Federal projects that may have a significant effect on the environment.

Objectives

The objectives of this activity are to:

- Rehabilitate lands damaged by users who have not fulfilled the requirements of contracts or permits for which performance bonds were posted; and
- Rehabilitate lands damaged in the course of unauthorized activities (e.g., trespass).

Base program

FLPMA authorizes the collection of deposits and requires the posting of performance bonds in certain circumstances from resource developers, purchasers, or permittees. It further authorizes the use of those funds to perform rehabilitation made necessary by actions of those users. The base estimated to become available in 1987 for repair of damaged lands and facilities is $1,342,000 and 10 FTE.

Increase from the 1987 Base

(dollars in thousands)

	1987 Base	1987 Estimate	Difference
$	1,342	1,650	+308
(FTE)	(10)	(10)	(---)

The projected increase from the 1987 Base reflects an anticipated higher level of receipts. This projection is based on recent collection experience and the increased emphasis on abatement of unauthorized use and land damage caused by users.

Distribution of change by object class

The object class detail for the proposed $308,000 increase is as follows:

	Amount
Lands and structures	$308,000

Justification of Program and Performance

Appropriation: Service Charges, Deposits and Forfeitures
Activity: Cost Recoverable Realty Cases

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
$	350	350	350	350	---
(FTE-T)	(8)		(8)	(8)	(---)

Impact of Public Law 99-177

	1986 Enacted To Date	PL 99-177 B.A. Cancellation	1986 Adjusted Approp.
Cost Recoverable Realty Cases	350	---	350

P.L. 99-177 does not cancel budget authority for activities in this appropriation. However, the law does provide for a cancellation of $10,000 in spending authority for cost recoverable realty cases. The nature of this indefinite appropriation will make it necessary, as a result of this cancellation, to cover additional work through funding provided to related program elements in the Management of Lands and Resources (MLR) appropriation and will further decrease the capability of those programs to complete planned units of accomplishment.

Authorization

43 U.S.C. 1719, 1732, 1745, 1746, P.L. 94-579	The Federal Land Policy and Management Act of 1976 authorizes collection of service charges and permitting deposits to finance the costs of certain application processing activities.

Objective

The objective of this program is to process certain types of realty cases on a cost recoverable basis from the applicants, as authorized by FLPMA.

FY 1987 program

This program provides for performance of certain realty services by BLM on a cost-recoverable basis. Persons or institutions which desire these services deposit money with the Bureau in advance for performance of the specified work. These services are as follows:

Expenses, Conveyance of Federally-Owned Mineral Interests. Funds received from applicants for conveyance of mineral interests under Section 209 of FLPMA are used to cover administrative costs, including costs of conducting an exploratory program, to determine whether and what kind of mineral deposits are under the land, evaluating the data obtained under the exploratory program to determine the fair market value of the mineral interests to be conveyed, and preparing and issuing the conveyance documents.

Expenses, Recordable Disclaimers of Interest. Funds received from applicants for recordable disclaimers of interest under Section 315 of FLPMA are used to cover administrative costs. These costs include determining whether the United States has an interest in the land, determining whether the land boundaries have changed due to riparian boundary changes, preparing the riparian specialist's report, and preparing and issuing the document of disclaimer.

Expenses, Correction of Conveyance Documents. Funds received from applicants for correction of conveyance documents under Section 316 of FLPMA are used to cover the administrative costs of determining whether an error exists and the costs involved in issuing the corrected patent or conveyance documents.

Expenses, Leases, Permits, and Easements. Funds received from applicants for land use authorizations under Section 302(b) of FLPMA are used to cover administrative costs which include, but are not limited to, costs of processing the application, monitoring construction, operation, and maintenance of authorized facilities, and monitoring rehabilitation and restoration of the lands.

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Service Charges, Deposits and Forfeitures

Object Class	1987 Base FTE	1987 Base Amount	1987 Estimate FTE	1987 Estimate Amount	Inc. (+) or Dec. (-) FTE	Inc. (+) or Dec. (-) Amount
11. Personnel Compensation:						
11.1 Full-time Permanent	48	1,820	48	1,820	---	---
11.3 Other than full-time permanent	9	185	9	185	---	---
11.5 Other personnel compensation	---	215	---	215	---	---
11.9 Total personnel compensation	57	2,220	57	2,220	---	---
Other Objects						
12.1 Personnel benefits		310		310		---
21.0 Travel and transportation of persons		50		100		+50
22.0 Transportation of things		120		120		---
23.2 Rental payments to others		5		5		---
23.3 Communications, utilities and miscellaneous charges		15		25		+10
24.0 Printing and reproduction		40		50		+10
25.0 Other services		647		500		-147
26.0 Supplies and materials		35		35		---
31.0 Equipment		5		5		---
32.0 Lands and structures		800		1,825		+1,025
Total requirements		4,247		5,195		+948

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SERVICE CHARGES, DEPOSITS, AND FORFEITURES
Program and Financing (in thousands of dollars)

Identification code 14-5017-0-2-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Rights-of-way processing........	1,659	1,690	2,695
00.02 Adopt-a-horse program...........	551	865	500
00.03 Repair of lands and facilities..	1,003	1,342	1,650
00.04 Cost recoverable realty cases...	187	350	350
10.00 Total obligations...........	3,400	4,247	5,195
Financing:			
21.40 Unobligated balance available, start of year.................	-3,993	-5,823	-5,823
24.40 Unobligated balance available, end of year..................	5,823	5,823	5,823
40.00 Budget authority (appropriation) (indefinite, special fund)...	5,230	4,247	5,195
Relation of obligations to outlays:			
71.00 Obligations incurred, net.......	3,400	4,247	5,195
72.40 Obligated balance, start of year	909	905	905
74.40 Obligated balance, end of year..	-905	-905	-905
90.00 Outlays.....................	3,404	4,247	5,195
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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SERVICE CHARGES, DEPOSITS, AND FORFEITURES
Object Classification (in thousands of dollars)

Identification code 14-5017-0-2-302		19 85 actual	19 86 estimate	19 87 estimate
	Personnel compensation:			
11.1	Full-time permanent............	1,819	1,820	1,820
11.3	Other than full-time permanent..	185	185	185
11.5	Other personnel compensation....	214	215	215
11.9	Total personnel compensation..	2,218	2,220	2,220
12.1	Personnel benefits: Civilian.....	308	310	310
21.0	Travel and transportation of persons..........................	89	100	100
22.0	Transportation of things..........	106	120	120
23.2	Rental payments to others.........	2	5	5
23.3	Communications, utilities, and miscellaneous charges..........	16	25	25
24.0	Printing and reproduction.........	45	50	50
25.0	Other services....................	625	500	500
26.0	Supplies and materials............	34	35	35
31.0	Equipment.........................	3	5	5
32.0	Lands and structures..............	-46	877	1,825
99.9	Total obligations............	3,400	4,247	5,195
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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SERVICE CHARGES, DEPOSITS, AND FORFEITURES
Personnel Summary

Identification code 14-5017-0-2-302	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	49	49	49
Total compensable workyears:			
Full-time equivalent employment	57	57	57
Full-time equivalent of overtime and holiday hours	7	7	7
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
SERVICE CHARGES, DEPOSITS, AND FORFEITURES
(P.L. 99-177 Sequestration)
Program and Financing (in thousands of dollars)

Identification code 14-5017-6-2-302	19 85 actual	19 86 estimate	19 87 estimate
10.00 Total obligations............	---	-174	---
Financing:			
21.40 Unobligated balance available, start of year..................	---	---	-174
24.40 Unobligated balance available, end of year....................	---	174	174
40.00 Budget authority............	---	---	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	---	-174	---
72.40 Obligated balance, start of year.	---	---	-47
74.40 Obligated balance, end of year...	---	47	---
90.00 Outlays......................	---	-127	-47
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Appropriation Summary Statement

Appropriation: Operation and Maintenance of Quarters (Permanent)

This permanent appropriation provides for the maintenance of quarters used by Bureau employees in areas where other housing alternatives are unavailable. Expenses are financed by collections received in the form of quarters rental payments. This account was established in 1986 under provisions of the 1985 Interior Appropriations Act.

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OPERATION AND MAINTENANCE OF QUARTERS
Program and Financing (in thousands of dollars)

Identification code 14-5048-0-2-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Direct program (object class 25)	---	90	---
00.91 Total direct program.......	---	90	---
01.01 Reimbursable program............	---	250	250
10.00 Total obligations..........	---	340	250
Financing:			
14.00 Offsetting collections from non-Federal sources: Revenue.	---	-250	-250
21.40 Unobligated balance available, start of year.................	---	---	-10
22.98 Unobligated balance transferred, net	---	-100	---
24.40 Unobligated balance available, end of year..................	---	10	10
60.00 Budget authority...............	---	---	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net.......	---	90	---
72.40 Obligated balance, start of year	---	---	20
73.40 Obligated balance transferred, net	---	27	---
74.40 Obligated balance, end of year..	---	-20	---
90.00 Outlays.....................	---	97	20
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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OPERATION AND MAINTENANCE OF QUARTERS
Object Classification (in thousands of dollars)

Identification code 14-4525-0-4-302	19 85 actual	19 86 estimate	19 87 estimate
Reimbursable obligations:			
Personnel compensation:			
11.1 Full-time permanent	---	52	52
11.3 Other than full-time permanent	---	5	5
11.5 Other personnel compensation	---	3	3
11.9 Total personnel compensation	---	60	60
12.1 Personnel benefits: Civilian	---	7	7
21.0 Travel and transportation of persons	---	7	7
22.0 Transportation of things	---	2	2
25.0 Other services	---	24	44
26.0 Supplies and materials	---	140	105
31.0 Equipment	---	5	10
32.0 Lands and structures	---	5	15
99.0 Subtotal, reimbursable obligations	---	250	250
99.9 Total obligations	---	340	250
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STANDARD FORM 300

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OPERATION AND MAINTENANCE OF QUARTERS
Personnel Summary

Identification code 14-5048-0-2-302	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions..........	---	1	1
Total compensable workyears: Full-time equivalent employment..........	---	1	1
Average GS grade..........	9.20	9.20	9.20
Average GS salary..........	27,306	27,306	27,306

Appropriation Summary Statement

Appropriation: Miscellaneous Permanent Appropriations

The majority of these appropriations provide for sharing receipts collected from the sale, lease, or use of public lands and resources with States and counties. BLM distributes these funds in accordance with various laws that specify the percentages to be paid and, in some cases, how the States and counties must use these funds.

Also included is the permanent appropriation of funds collected from commercial road users on roads maintained by the Bureau in lieu of user maintenance. This is normally applicable to roads subject to heavy, continuous use involving several users at a time such as mainline timber access roads in western Oregon. The funds are permanently appropriated by statute and, therefore, do not require an annual appropriation.

The following activities are included within the total appropriation:

1. Payments to Coos and Douglas Counties, Oregon, receipts from Coos Bay Wagon Road grant lands

2. Payments to counties, Oregon and California grant lands

3. Payments to States (proceeds of sales)

4. Payments to States from grazing receipts, etc., public lands outside grazing districts

5. Payments to States from grazing receipts, etc., public lands within grazing districts

6. Payments to States from grazing receipts, etc., public lands within grazing districts, miscellaneous

7. Payments to Alaska, National Petroleum Reserve

8. Payments to counties, National Grasslands

9. Expenses, road maintenance deposits

10. Payments to Nevada from receipts on land sales

11. Payments from proceeds, sale of water

12. Payments to Oklahoma (royalties)

Summary of Requirements

Appropriation: Miscellaneous Permanent Appropriations	FTE-T	Amount	FTE-T	Amount
Appropriation currently available, 1986			95	15,154
P.L. 99-177 Budget Authority Cancellation			—	-3,641 1/
Adjusted Appropriation, 1986			95	11,513
Adjustments to Base:				
Adjustment for 1986 impact of P.L. 99-177		+3,641		
Adjustment to reflect a normal level of payments to the O&C counties		+65,100		
Total, Adjustments to Base			—	+68,741
1987 Base Budget			95	80,254
Program Changes (Changes to Base budget, detailed below)			---	-29,081
Total Requirements (1987 Estimate)			95	51,173

Comparison by activity	1985 Actual FTE-T	1985 Actual Amount	1986 Enacted to Date FTE-T	1986 Enacted to Date Amount	P.L. 99-177 Reduction	1986 Adjusted Approp.	1987 Base FTE-T	1987 Base Amount	1987 Estimate 2/ FTE-T	1987 Estimate 2/ Amount	Inc(+)/Dec(-) from 1986 Appropriation FTE-T	Inc(+)/Dec(-) from 1986 Appropriation Amount	Inc(+)/Dec(-) from 1986 Adjusted Approp.	Inc(+)/Dec(-) from 1987 Base FTE-T	Inc(+)/Dec(-) from 1987 Base Amount
Payments to Coos and Douglas Counties, Oregon from receipts, Coos Bay Wagon Rd. Grant lands	---	528	---	580	-25	555	---	580	---	580	---	---	+25	---	---
Payments to counties, O&C grant lands	---	125,325	---	---	-2,989	-2,989	---	65,100	---	40,100	---	+40,100	+43,089	---	-25,000
Payments to States (proceeds of sales) (receipt limitation)	---	742	---	766	-33	733	---	766	---	936	---	+170	+203	---	+170
Payments to States from grazing receipts, etc., public lands outside grazing districts	---	1,001	---	1,000	-43	957	---	1,000	---	1,024	---	+24	+67	---	+24

Comparison by activity	1985 Actual FTE-T	1985 Actual Amount	1986 Enacted to Date FTE-T	1986 Enacted to Date Amount	P.L. 99-177 Reduction	1986 Adjusted Approp.	1987 Base FTE-T	1987 Base Amount	1987 Estimate [2] FTE-T	1987 Estimate [2] Amount	Inc(+)/Dec(-) from 1986 Appropriation FTE-T	Inc(+)/Dec(-) from 1986 Appropriation Amount	Inc(+)/Dec(-) from 1986-) Adjusted Approp.	Inc(+)/Dec(-) from 1987 Base FTE-T	Inc(+)/Dec(-) from 1987 Base Amount
Payments to States from grazing receipts, etc. public lands within grazing districts	---	1,549	---	1,515	-65	1,450	---	1,515	---	1,550	---	+35	+100	---	+35
Payments to States from grazing receipts, etc. public lands within districts, misc.	---	6	---	5	---	5	---	5	---	8	---	+3	+3	---	+3
Payments to Alaska, National Petroleum Reserve	---	4,803	---	4,614	-198	4,416	---	4,614	---	---	---	-4,614	-4,416	---	-4,614
Payments to counties, national grasslands	---	569	---	620	-27	593	---	620	---	625	---	+5	+32	---	+5
Expenses, road maintenance deposits	95	5,582	95	5,600	-241	5,359	95	5,600	95	5,600	---	---	+241	---	---
Payments to Nevada from receipts on land sales	---	833	---	454	-20	434	---	454	---	750	---	+296	+316	---	+296
Payments from proceeds, sale of water	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Payments to Oklahoma (royalties)	---	13	---	---	---	---	---	---	---	---	---	---	---	---	---
	95	140,951	95	15,154	-3,641	11,513	95	80,254	95	51,173	---	+36,019	+39,660	---	-29,081

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[1] With the exception of the road maintenance activity, the impact of the P.L. 99-177 reductions will mean that payments to States and counties will be below the amounts to which they are entitled under existing law. Maintenance of roads, primarily forest roads of western Oregon, will also be reduced.

[2] Estimates of the appropriations are based, in part, upon anticipated receipts and collections; some may vary from the estimate depending upon actual receipts or collections received.

Justification of Base Adjustments

Miscellaneous Permanent Appropriations

	FTE	Amount ($000)
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellations.............	--	+3,641

The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177) requires a 4.3 percent reduction in non-exempt programs in FY 1986. Since the 4.3 percent reduction applies to FY 1986 only, this adjustment is made to allow a more comparable basis for showing program changes from FY 1986 to FY 1987.

Justification of Program and Performance

Activity: Payments to Coos and Douglas Counties, Oregon, for Coos Bay Wagon Road Grant Lands

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	580	555	580	580	---
(FTE-T)	(---)	(---)	(---)	(---)	(---)

In accordance with 54 Stat. 753-754, payments in lieu of taxes are made to Coos and Douglas counties out of receipts from the Coos Bay Wagon Road grant lands in Oregon. These payments are used for schools, roads, highways, bridges, and port districts and are paid at the same ad valorem tax rate as private lands.

Activity: Payments to Counties, Oregon and California (O&C) Grant Lands

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	---	-2,989	65,100	40,100	-25,000
(FTE-T)	(---)	(---)	(---)	(---)	(---)

In accordance with 39 Stat. 218 and 50 Stat. 876, as modified by annual appropriations acts (O&C Grant Land Fund), 50 percent of the receipts of Oregon and California grant land funds are paid to the counties in which the lands are situated, to be used as other county funds. Normally, the payments to the counties are issued at the beginning of the fiscal year following the year in which the receipts are collected. In 1985, however, a major portion of the payments which would have normally been made in 1986 were issued prior to the end of 1985. For this reason, budget authority for 1986 is shown as zero.

Decrease from 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	65,100	40,100	-25,000
(FTE-T)	(---)	(---)	(---)

- The 1987 Estimate incorporates an Administration initiative to share net receipts with the O&C counties. Under this initiative, receipts which are currently shared on a gross basis will be shared net of Federal costs directly related to the generation of these revenues.

- o It is anticipated that there will be an increase in 1986 receipts resulting mainly from the scheduled harvest of extended timber sales that have not been bought out under the Federal Timber Contract Payment Modification Act (P.L. 98-478).

Activity: Payments to States (proceeds of sales)

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	766	733	766	936	+170
(FTE-T)	(---)		(---)	(---)	(---)

In accordance with 31 U.S.C. 1305, the States are paid 5 percent of the net proceeds (4 percent of gross proceeds) from the sale of public land and public land products. These payments are to be used for educational purposes or for construction of public roads and improvements.

Increase from 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	766	936	+170
(FTE)	(---)	(---)	(---)

The increase is primarily related to a projected increase in timber sale receipts from public domain lands in western Oregon.

Activity: Payments to States from grazing receipts, etc., public lands outside grazing districts

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	1,000	957	1,000	1,024	+24
(FTE-T)	(---)		(---)	(---)	(---)

In accordance with the Taylor Grazing Act of 1934 (43 U.S.C. 315i and 315m), the States are paid 50 percent of the grazing fee receipts from public lands outside of organized grazing districts. The 1987 Estimate is based on continuation of the grazing fee at $1.35/AUM.

Increase from 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	1,000	1,024	+24
(FTE)	(---)	(---)	(---)

The increase results from slightly higher estimated total receipts for 1986.

Activity: Payments to States from grazing receipts, etc., public lands within grazing districts

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	1,515	1,450	1,515	1,550	+35
(FTE-T)	(---)		(---)	(---)	(---)

In accordance with the Taylor Grazing Act of 1934, (43 U.S.C. 315b and 315i), the States are paid 12 1/2 percent of grazing fee receipts from lands within organized grazing district boundaries. The 1987 Estimate is based on a continuation of the grazing fee at $1.35/AUM.

Increase from 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	1,515	1,550	+35
(FTE)	(---)	(---)	(---)

The increase results from a slightly higher estimate of total receipts for 1986.

Activity: Payments to States from grazing receipts, etc., public lands within grazing districts, miscellaneous

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	5	5	5	8	+3
(FTE-T)	(---)		(---)	(---)	(---)

In accordance with 43 U.S.C. 315, the States are paid specifically determined amounts from grazing fee receipts from miscellaneous lands within grazing districts when payment is not feasible on a percentage basis. The 1987 Estimate is based on a continuation of the grazing fee at $1.35/AUM.

Increase from 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	5	8	+3
(FTE)	(---)	(---)	(---)

The increase results from a slightly higher estimate of receipts for 1986.

Activity: Payments to Alaska, National Petroleum Reserve

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	4,614	4,416	4,614	---	-4,614
(FTE-T)	(---)		(---)	(---)	(---)

In accordance with 94 Stat. 2964, Alaska is paid 50 percent of the receipts from sales, bonuses, royalties, and rentals resulting from the leasing of oil and gas in the National Petroleum Reserve in Alaska for use in planning, construction, maintenance, and operation of essential public facilities and other necessary provisions of public service.

Decrease from 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	4,614	---	-4,614
(FTE-T)	(---)	(---)	(---)

The decrease results from the expectation that there will be no sales or other activities in 1986 that would generate receipts to be paid in 1987.

Activity: Payments to counties, National Grasslands

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	620	593	620	625	+5
(FTE-T)	(---)		(---)	(---)	(---)

In accordance with 7 U.S.C. 1012, 25 percent of the revenues received from the use of National Grasslands, including mineral leasing, is paid to the counties in which such lands are located. These funds are used for schools and roads.

Increase from 1987 Base

	FY 1987 Base	FY 1987 Estimate	Difference
$	620	625	+5
(FTE)	(---)	(---)	(---)

The increase results from a slightly higher estimate of receipts from activities on the National Grasslands.

Activity: Road Maintenance Deposits

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	5,600	5,359	5,600	5,600	---
(FTE-T)	(95)		(95)	(95)	(---)

Public Law 94-579 (FLPMA) provides for the permanent appropriation of money collected from commercial road users in lieu of user maintenance. Receipts are appropriated to BLM for road maintenance. Applicable roads are normally subject to heavy, continuous use by several users. Mainline timber access roads in western Oregon fall into this category. Monies collected on Oregon and California grant lands are available for those lands only (43 U.S.C. 1701, et seq.), excluding $150,000 which is earmarked for administrative expenses.

Activity: Payments to Nevada from receipts on land sales

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	454	434	454	750	+296
(FTE-T)	(---)		(---)	(---)	(---)

Public Law 96-586 (Burton-Santini Act) of 1980 authorized and directed the sale of up to 700 acres of certain lands in Clark County, Nevada and the acquisition of environmentally sensitive lands in the Lake Tahoe Basin. The Act directed that 5 percent of the annual proceeds realized from the sale of such lands be returned to the State of Nevada and that 10 percent of the proceeds be returned to the county or municipality in which the land sale occurred. The funds returned to the State are to be used for the State's general education program, and the monies returned to the county or municipality are to be used for acquisition and development of recreational lands and facilities.

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Miscellaneous Permanent Appropriations

	1987 Base		1987 Estimate		Inc. (+) Dec. (-)	
	FTE	Amount	FTE	Amount	FTE	Amount
Object Class						
11. Personnel compensation:						
11.1 Full-time permanent	95	2,594	95	2,594	---	---
Total personnel compensation	95	2,594	95	2,594	---	---
Other Objects						
12.1 Personnel benefits		415		415		---
22.0 Transportation of things		1,000		1,000		---
23.2 Communications, utilities, and miscellaneous charges		30		30		---
25.0 Other services		1,100		1,100		---
26.0 Supplies and materials		200		200		---
31.0 Equipment		61		61		---
32.0 Lands and structures		200		200		---
41.0 Grants, subsidies and contributions		74,654		45,573		-29,081
Total requirements		80,254		51,173		-29,081

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS PERMANENT APPROPRIATIONS
Program and Financing (in thousands of dollars)

Identification code 14-9921-0-2-999	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Payments to Oklahoma (royalties).	13	---	---
00.02 Payments to Coos and Douglas Counties, Oregon, from receipts, Coos Bay Wagon Road grant lands..........	528	580	580
00.03 Payments to counties, Oregon and California grant lands..........	65,980	61,124	40,100
00.04 Payments to States (proceeds of sales)............................	742	766	936
00.05 Payments to States from grazing receipts, etc., public lands outside grazing districts.......	1,001	1,000	1,024
00.06 Payments to States from grazing receipts, etc., public lands within grazing districts........	1,549	1,515	1,550
00.07 Payments to States from grazing receipts, etc., public lands within districts, miscellaneous.	6	5	8
00.08 Payments to Alaska, National Petroleum Reserve...............	4,803	4,614	---
00.09 Payments to counties, national grasslands......................	569	620	625
00.10 Expenses, road maintenance deposits	6,472	5,600	5,600
00.11 Payments to Nevada from receipts on land sales.....................	833	454	750
10.00 Total obligations...........	82,496	76,278	51,173
Financing:			
21.40 Unobligated balance available, start of year................	-3,254	-61,709	-585
24.40 Unobligated balance available, end of year..................	61,709	585	585
60.00 Budget authority (appropriation) (permanent, indefinite, special fund)..............	140,951	15,154	51,173
(Memo cost: 20.8)	(Memo cost: 5)	(Memo cost: 5)	(Memo cost: 4.8)

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS PERMANENT APPROPRIATIONS
Program and Financing (in thousands of dollars)

Identification code 14-9921-0-2-999	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	82,496	76,278	51,173
72.40 Obligated balance, start of year.	9,104	-48,341	2,612
74.40 Obligated balance, end of year...	48,341	-2,612	-2,612
90.00 Outlays......................	139,940	25,325	51,173
Distribution of budget authority by account:			
Payments to Oklahoma (royalties)........	13	---	---
Payments to Coos and Douglas Counties, Oregon, from receipts, Coos Bay Wagon Road grant lands....................	582	580	580
Payments to counties, Oregon and California grant lands...............	125,325	---	40,100
Payments to States (proceeds of sales) (receipt limitations)................	742	766	936
Payments to States from grazing receipts, etc., public lands outside grazing districts............................	1,001	1,000	1,024
Payments to States from grazing receipts, etc., public lands within grazing districts............................	1,549	1,515	1,550
Payments to States from grazing receipts, etc., public lands within grazing districts, miscellaneous.............	6	5	8
Payments to Alaska, National Petroleum Reserve	4,803	4,614	---
Payments to counties, national grasslands	569	620	625
Expenses, road maintenance deposits.....	5,581	5,600	5,600
Payments to Nevada from receipts on land sales..................................	833	454	750
Payments from proceeds, sale of water...	1	---	---
(Memo cost: 21.8)	(Memo cost: 3)	(Memo cost: 3)	(Memo cost: 4.8)

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS PERMANENT APPROPRIATIONS
Program and Financing (in thousands of dollars)

Identification code 14-9921-0-2-999	19 85 actual	19 86 estimate	19 87 estimate
Distribution of outlays by account:			
Leasing of grazing lands	4	---	---
Payments to Oklahoma (royalties)	14	---	---
Payments to Coos and Douglas Counties, Oregon, from receipts, Coos Bay Wagon Road grant lands	528	580	580
Payments to counties, Oregon and California grant lands	116,934	10,171	40,100
Payments to States (proceeds of sales) (receipt limitations)	872	766	936
Payments to States from grazing receipts, etc., public lands outside grazing districts	1,024	1,000	1,024
Payments to States from grazing receipts, etc., public lands within grazing districts	1,544	1,515	1,550
Payments to States from grazing receipts, etc., public lands within grazing districts, miscellaneous	5	5	5
Payments to Alaska, National Petroleum Reserve	10,911	4,614	---
Payments to counties, national grasslands	569	620	625
Expenses, road maintenance deposits	6,702	5,600	5,600
Payments to Nevada from receipts on land sales	833	654	750

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS PERMANENT APPROPRIATIONS
Object Classification (in thousands of dollars)

[illegible]	[illegible]	[illegible]	[illegible]
Personnel compensation:			
11.1 Full-time permanent	[illegible]	[illegible]	[illegible]
11.3 Other than full-time permanent	[illegible]	[illegible]	[illegible]
11.5 Other personnel compensation	[illegible]	[illegible]	[illegible]
11.9 Total personnel compensation	[illegible]	[illegible]	[illegible]
12.1 Personnel benefits: Civilian	[illegible]	[illegible]	[illegible]
21.0 Travel and transportation of persons	1	1	1
22.0 Transportation of things	[illegible]	[illegible]	[illegible]
23.3 Communications, utilities, and miscellaneous charges	[illegible]	[illegible]	[illegible]
25.0 Other services	[illegible]	[illegible]	[illegible]
26.0 Supplies and materials	[illegible]	[illegible]	[illegible]
31.0 Equipment	[illegible]	[illegible]	[illegible]
32.0 Lands and structures	[illegible]	[illegible]	[illegible]
41.0 Grants, subsidies, and contributions	[illegible]	[illegible]	[illegible]
99.0 Total obligations	[illegible]	[illegible]	[illegible]

Standard Form 300

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS PERMANENT APPROPRIATIONS
Personnel Summary

Identification code 14-9921-0-2-999	1985 actual	1986 estimate	1987 estimate
Total number of full-time permanent positions	74	74	74
Total compensable workyears:			
Full-time equivalent employment	95	95	95
Average GS grade	9.20	9.20	9.20
Average GS salary	27,306	27,306	27,306

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS PERMANENT APPROPRIATIONS
(P.L. 99-177 Sequestration)
Program and Financing (in thousands of dollars)

Identification code 14-9921-6-2-999	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Payments to Oklahoma (royalties)	---	---	---
00.02 Payments to Coos and Douglas Counties, Oregon, from receipts, Coos Bay Wagon Road grant lands	---	-28	---
00.03 Payments to counties, Oregon and California grant lands	---	-2,940	---
00.04 Payments to States (proceeds of sales)	---	-37	---
00.05 Payments to States from grazing receipts, etc., public lands outside grazing districts	---	-48	---
00.06 Payments to States from grazing receipts, etc., public lands within grazing districts	---	-73	---
00.07 Payments to States from grazing receipts, etc., public lands within districts, miscellaneous	---	---	---
00.08 Payments to Alaska, National Petroleum Reserve	---	-222	---
00.09 Payments to counties, national grasslands	---	-30	---
00.10 Expenses, road maintenance deposits	---	-241	---
00.11 Payments to Nevada from receipts on land sales	---	-22	---
10.00 Total obligations	---	-3,641	---
40.00 Budget authority	---	-3,641	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net	---	-3,641	---
72.40 Obligated balance, start of year	---	---	-943
74.40 Obligated balance, end of year	---	943	---
90.00 Outlays	---	-2,698	-943

Appropriation Summary Statement

Appropriation: Miscellaneous Trust Funds

This account includes two indefinite trust fund appropriations as follows:

Land and Resource Management Trust Fund - Monies are contributed by private entities or non-Federal organizations for: 1) resource development, protection and management; 2) conveyance of lands omitted in original surveys; and 3) for public surveys requested by individuals.

Trustee Funds, Alaska Townsites - Monies are derived from the sale of Alaska town lots to non-Natives and are available to cover the expenses of the sale and maintenance of townsites.

Appropriation Language Sheet

Miscellaneous Trust Funds

In addition to amounts authorized to be expended under existing law, there is hereby appropriated such amounts as may be contributed under section 307 of the Act of October 21, 1976 (43 U.S.C. 1701), and such amounts as may be advanced for administrative costs, surveys, appraisals, and costs of making conveyances of omitted lands under section 211(b) of that Act, to remain available until expended.

(43 U.S.C. 315h, 315i, 355, 759, 761, 775, 867, 1719, 1721, 1737; 48 Stat. 1224-36, 74 Stat. 506; Department of the Interior and Related Agencies Appropriations Act, 1986, Public Law 99-190.)

Appropriation Language Citations

Bureau of Land Management

Appropriation: Miscellaneous Trust Funds

Appropriation language and citations:

In addition to amounts authorized to be expended under existing law, there is hereby appropriated such amounts as may be contributed under section 307 of the Act of October 21, 1976 (43 U.S.C. 1701), and such amounts as may be advanced for administrative costs, surveys, appraisals, and costs of making conveyances of omitted lands under section 211(b) of that Act, to remain available until expended.

43 U.S.C. 315h
43 U.S.C. 315i
43 U.S.C. 355
43 U.S.C. 759
43 U.S.C. 761
43 U.S.C. 775
43 U.S.C. 887
43 U.S.C. 1719
43 U.S.C. 1721
43 U.S.C. 1737
48 Stat. 1224-36
74 Stat. 506
P.L. 99-190

43 U.S.C. 315h and 315i provide for the Secretary of the Interior to accept contributions for administration, protection and improvement of grazing lands and for these funds to be deposited into the Treasury in a trust fund and permanently appropriated for use by the Secretary.

43 U.S.C. 355, repealed by FLPMA (1976), provided for the sale of town lots to non-Native Alaskans.

43 U.S.C. 759 provides for accomplishment of public surveys of whole townships through a trust fund; deposits for expenses deemed appropriate.

43 U.S.C. 761 provides for refunds from trust funds established in 43 U.S.C 759 of costs in excess of expenses.

43 U.S.C. 775 provides for costs of management of lands and for surveying federally controlled lands through a trust fund.

43 U.S.C. 887 provides for railroads to pay for surveys within their grants through trust funds.

43 U.S.C. 1719 provides for payment of administrative costs through a trust account for the conveyance of mineral interests.

43 U.S.C. 1721 provides for the donation of funds for surveys of omitted lands.

43 U.S.C. 1737 provides for funds contributed for 1) resource development, protection, and management; 2) conveyance of lands omitted in original surveys; and 3) public surveys requested by individuals to be placed in a trust account to be available until expended.

48 Stat. 1224-36 provides for payments in advance for public surveys.

74 Stat. 506 provides for contributed funds to be used for maintenance of access roads and protection of public lands.

Public Law 99-190, Department of the Interior and Related Agencies Appropriations Act, 1986, provides the current appropriation for FLPMA-authorized contributions.

Summary of Requirements

(Dollar amounts in thousands)

Appropriation: Miscellaneous Trust Funds	FTE-T	Amount	FTE-T	Amount
Appropriation currently available, 1986			30	700
P.L 99-177 Budget Authority Cancellation			___	---
Adjusted Appropriation, 1986			30	700
Adjustments to Base			---	---
1987 Base Budget			30	700
Program Changes (Changes to Base budget, detailed below)			---	---
Total Requirements (1987 Estimate)			30	700

Comparison by activity	1985 Actual FTE-T	1985 Actual Amount	1986 Enacted to Date FTE-T	1986 Enacted to Date Amount	P.L. 99-177 B.A. Cancellation	1986 Adjusted Approp.	1987 Base FTE-T	1987 Base Amount	1987 Estimate 2/ FTE-T	1987 Estimate 2/ Amount	Inc(+)/Dec(-) from 1986 Appropriation FTE-T	Inc(+)/Dec(-) from 1986 Appropriation Amount	Inc(+)/Dec(-) from 1986 Adjusted Approp.	Inc(+)/Dec(-) from 1987 Base FTE-T	Inc(+)/Dec(-) from 1987 Base Amount
1. Land and Resource Management Trust Fund	30	3,666	30	699	---	699	30	699	30	699	---	---	---	---	---
2. Trust Funds of Alaska Townsites	---	1	---	1	---	1	---	1	---	1	---	---	---	---	---
Total Requirements	30	3,667	30	700	---	700	30	700	30	700	---	---	---	---	---
Current Appropriation (Indefinite)		(100)		(100)		(100)		(100)		(100)	---	---	---	---	---
Permanent Appropriation (Indefinite)		(3,567)		(600)		(600)		(600)		(600)	---	---	---	---	---

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1/ These appropriations are for indefinite amounts, and actual appropriations depend upon the amounts contributed or donated from non-Federal sources to accomplish work authorized to be performed by BLM under these authorities. Actual amounts will vary from estimates.

Justification of Program and Performance

Appropriation: Miscellaneous Trust Funds (Indefinite)
Activities: Land and Resource Management Trust Fund and Trustee Funds, Alaska Townsites

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc (+) Dec. (-) from Base
$	700	700	700	700	—
(FTE-T)	(30)		(30)	(30)	(—)

Impact of Public Law 99-177

	1986 Enacted To Date	P.L. 99-177 B.A. Cancellation	1986 Adjusted Approp.
Miscellaneous Trust Funds	700	—	700

Contributions are exempt from sequestration under P.L. 99-177.

Authorization

43 U.S.C. 1719, 1721 P.L. 94-579	The Federal Land Policy and Management Act (FLPMA) of 1976 provides for the acceptance of contributed money or services for: 1) resource development, protection and management; 2) conveyance of omitted lands to States or their political subdivisions; and 3) conducting public surveys requested by individuals provided that estimated costs are paid prior to project initiation.
43 U.S.C. 315 P.L. 73-482	The Taylor Grazing Act of 1934, as amended, provides for acceptance of contributions for range improvement purposes.
43 U.S.C. 355	The Act of March 3, 1891 (section 11) provided for the sale of town lots to non-Native Alaskans. This Act was repealed by FLPMA (1976). The Alaska townsite trustee funds authorized by 31 U.S.C. 1321 provide for survey and deed recordation of town lots occupied prior to FLPMA.

Objectives

- o Provide for resource development, protection and management through the utilization of contributions of money and services; and
- o Provide public surveys when estimated costs are contributed in advance.

FY 1987 program

LAND AND RESOURCE MANAGEMENT TRUST FUND

The 1987 Estimate is $699,000 and 30 FTE. This program provides for performance of certain cadastral surveys, conservation practices, and administrative actions by the BLM, financed by contributions of money from the recipients of these BLM services. Contributions must be deposited before the Bureau begins work on the project, and any monies remaining after completion of the project are returned to the contributor. In recent years, contributions for resource development, protection and management have included such diverse projects as range improvements, ORV recreation area maintenance and protection of endangered species. The acceptance of contributions is authorized by sections 211 (omitted lands) and 307(c) (studies, cooperative agreements, and contributions) of FLPMA (1976). Included in the 1987 program are estimated contributions received from the State of California Off-Highway Vehicle license ("green sticker") funds and used by BLM for the development, maintenance and operation of benefiting projects on BLM-administered public lands in California. Acceptance of contributions is also authorized by the Taylor Grazing Act, 43 U.S.C. 315, (rangeland improvement contributions) and by 43 U.S.C. 759, 760, 761, 775 and 887 (public surveys); and these contributions are permanently appropriated to the Secretary for such uses by those Acts.

TRUSTEE FUNDS, ALASKA TOWNSITES

The 1987 Estimate is $1,000.

Alaska town lot purchasers pay the cost of survey and deed recordation plus $25. (Native Alaskans are exempt from payment.) The sale of lots was originally authorized by the Act of March 3, 1891, which was repealed by FLPMA. The Comptroller General Opinion of November 18, 1935, and 31 U.S.C. 1321 authorize the trust funds. Currently, only lots occupied prior to the passage of FLPMA may be deeded to their occupants; all other lots are the property of the municipality. As a result, activity in this appropriation is extremely low.

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Miscellaneous Trust Funds

Object Class		1987 Estimate FTE	1987 Estimate Amount
11.	Personnel Compensation:		
11.1	Full-time permanent	25	276
11.3	Other than full-time permanent	5	74
11.5	Other personnel compensation	---	15
11.8	Special personal services payments	---	2
11.9	Total personnel compensation	30	367
	Other Objects		
12.1	Personnel benefits		45
21.0	Travel and transportation of persons		20
22.0	Transportation of things		20
23.2	Communications, utilities, and miscellaneous charges		20
25.0	Other services		46
26.0	Supplies and materials		65
31.0	Equipment		17
32.0	Lands and structures		100
	Total requirements		700

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS TRUST FUNDS
Program and Financing (in thousands of dollars)

Identification code 14-9971-0-7-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Land and resource management trust fund	2,866	1,099	999
00.02 Trustee funds, Alaska townsites	7	1	1
10.00 Total obligations	2,873	1,100	1,000
Financing:			
21.40 Unobligated balance available, start of year	-1,248	-2,042	-1,642
24.40 Unobligated balance available, end of year	2,042	1,642	1,342
39.00 Budget authority	3,667	700	700
Budget authority:			
Current:			
40.00 Appropriation (indefinite)	---	100	100
Permanent:			
60.00 Appropriation (indefinite)	3,667	600	600
Relation of obligations to outlays:			
71.00 Obligations incurred, net	2,873	1,100	1,000
72.40 Obligated balance, start of year	506	763	1,163
74.40 Obligated balance, end of year	-763	-1,163	-1,463
90.00 Outlays	2,616	700	700
Distribution of budget authority by account:			
Land and resource management trust fund	3,667	699	699
Trustee funds, Alaska townsites	1	1	1
Distribution of outlays by account:			
Land and resource management trust fund	2,610	699	699
Trustee funds, Alaska townsites	1	1	1
(Memo cost: 21.0)	(Memo cost: 5)	(Memo cost: 5)	(Memo cost: 4.9)

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS TRUST FUNDS
Object Classification (in thousands of dollars)

Identification code 14-9971-0-7-302		19 85 actual	19 86 estimate	19 87 estimate
	Personnel compensation:			
11.1	Full-time permanent	587	587	587
11.3	Other than full-time permanent	196	170	170
11.5	Other personnel compensation	46	23	23
11.9	Total personnel compensation	829	780	780
12.1	Personnel benefits: Civilian	100	95	95
21.0	Travel and transportation of persons	119	40	40
22.0	Transportation of things	108	50	30
23.3	Communications, utilities, and miscellaneous charges	37	40	40
24.0	Printing and reproduction	5	---	---
25.0	Other services	642	65	---
26.0	Supplies and materials	387	30	15
31.0	Equipment	213	---	---
32.0	Lands and structures	433	---	---
99.9	Total obligations	2,873	1,100	1,000
	(Memo cut: 21.5)	(Memo cut: 5)	(Memo cut: 5)	(Memo cut: 4.6)

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DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MISCELLANEOUS TRUST FUNDS
Personnel Summary

[illegible] 14-9971-0-7-302	[illegible]	[illegible]	[illegible]
Total number of full-time permanent positions	21	21	21
Total compensable workyears:			
Full-time equivalent employment	20	20	20
Full-time equivalent of overtime and holiday hours	2	2	2
Average GS grade	9.20	9.20	9.20
Average GS salary	27,304	27,304	27,304

[illegible]

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
CONSOLIDATED SCHEDULE OF PERMANENT POSITIONS
DETAIL OF PERMANENT POSITIONS

	[illegible] [illegible]	[illegible] [illegible]	[illegible] [illegible]
Executive level V	[illegible]	[illegible]	[illegible]
Subtotal	[illegible]	[illegible]	[illegible]
ES-5	[illegible]	[illegible]	[illegible]
ES-4	[illegible]	[illegible]	[illegible]
ES-3	[illegible]	[illegible]	[illegible]
ES-2	[illegible]	[illegible]	[illegible]
ES-1	[illegible]	[illegible]	[illegible]
Subtotal	[illegible]	[illegible]	[illegible]
GS/GM-15	[illegible]	[illegible]	[illegible]
GS/GM-14	[illegible]	[illegible]	[illegible]
GS/GM-13	[illegible]	[illegible]	[illegible]
GS-12	[illegible]	[illegible]	[illegible]
GS-11	[illegible]	[illegible]	[illegible]
GS-10	[illegible]	[illegible]	[illegible]
GS-09	[illegible]	[illegible]	[illegible]
GS-08	[illegible]	[illegible]	[illegible]
GS-07	[illegible]	[illegible]	[illegible]
GS-06	[illegible]	[illegible]	[illegible]
GS-05	[illegible]	[illegible]	[illegible]
GS-04	[illegible]	[illegible]	[illegible]
GS-03	[illegible]	[illegible]	[illegible]
GS-02	[illegible]	[illegible]	[illegible]
Subtotal	[illegible]	[illegible]	[illegible]
Ungraded	[illegible]	[illegible]	[illegible]
Total permanent positions	[illegible]	[illegible]	[illegible]
Unfilled positions, end of year	[illegible]	[illegible]	[illegible]
Total permanent employment, end of year	[illegible]	[illegible]	[illegible]

Appropriation Language Sheet

Administrative Provisions

Appropriations for the Bureau of Land Management shall be available for purchase, erection, and dismantlement of temporary structures and alteration and maintenance of necessary buildings and appurtenant facilities to which the United States has title; up to $10,000 for payments, at the discretion of the Secretary, for information or evidence concerning violations of laws administered by the United States Bureau of Land Management; miscellaneous and emergency expenses of enforcement activities authorized or approved by the Secretary and to be accounted for solely on his certificate, not to exceed $10,000: Provided, That appropriations herein made for the Bureau of Land Management expenditures in connection with the revested Oregon and California Railroad and reconveyed Coos Bay Wagon Road grant lands (other than expenditures made under the appropriation "Oregon and California grant lands") shall be reimbursed to the General Fund of the Treasury from the 25 per centum referred to in subsection (c), title II, of the Act approved August 28, 1937, (50 Stat. 876), of the special fund designated the "Oregon and California land grant fund" and section 4 of the Act approved May 24, 1939 (53 Stat. 754), of the special fund designated the "Coos Bay Wagon Road grant fund": Provided further, That appropriations herein made may be expended for surveys of Federal lands of the United States and on a reimbursable basis for surveys of Federal lands of the United States and for protection of lands for the State of Alaska: Provided further, That an appeal of any reductions in grazing allotments on public rangelands must be taken within 30 days after receipt of a final grazing allotment decision. Reductions of up to 10 per centum in grazing allotments shall become effective when so designated by the Secretary of the Interior. Upon appeal any proposed reduction in excess of 10 per centum shall be suspended pending final action on the appeal, which shall be completed within two years after the appeal is filed; Provided further, That appropriations herein made shall be available for paying costs incidental to the utilization of services contributed by individuals who serve without compensation as volunteers in aid of work of the Bureau.

[Notwithstanding any other provision of this Act, in the event the sale, award, or operation of any timber sale or sales in the Medford (Oregon) District of the Bureau of Land Management is enjoined, stayed or otherwise delayed by reason of administrative appeal or judicial review, the Secretary of the Interior shall resell timber returned under provisions of the Federal Timber Contract Payment Modification Act to the extent necessary to achieve sale of the full annual allowable cut for fiscal years 1983 and 1984 in the Medford District. The Secretary shall determine the potential environmental degradation of timber sales returned pursuant to the Federal Timber Contract Payment Modification Act and shall characterize each sale's potential environmental impact as minimal, moderate, or serious. The Secretary must give resale priority to those sales with the least risk of potential environmental degradation. Sales that are reoffered may be modified, including minor additions. Any decision of the Secretary to resell timber shall not be subject to judicial review.]

(Department of the Interior and Related Agencies Appropriations Act, 1984, as included in Public Law 98-146.)

Administrative Provisions

Justification of Proposed Language Changes

1) Deletion:

"Notwithstanding any other provision of this Act, in the event the sale, award, or operation of any timber sale or sales in the Medford (Oregon) District of the Bureau of Land Management is enjoined, stayed or otherwise delayed by reason of administrative appeal or judicial review, the Secretary of the Interior shall resell timber returned under provisions of the Federal Timber Contract Payment Modification Act to the extent necessary to achieve sale of the full annual allowable cut for fiscal years 1985 and 1986 in the Medford District. The Secretary shall determine the potential environmental degradation of timber sales returned pursuant to the Federal Timber Contract Payment Modification Act and shall characterize each sale's potential environmental impact as minimal, moderate, or serious. The Secretary must give resale priority to those sales with the least risk of potential environmental degradation. Sales that are reoffered may be modified, including minor additions. Any decision of the Secretary to resell timber shall not be subject to judicial review."

The specific authority given to the Secretary in this language was restricted to fiscal years 1985 and 1986; therefore, this language is no longer needed.

DEPARTMENT OF THE INTERIOR

FY 1987 Budget for Consulting Services

Bureau: Land Management

Appropriation Account Title/ Iden. Code No.	Amount Requested in 1987	Program Requiring Services	Description of Need for Services
Management of Lands and Resources (14-1109-0-1-302)	$15,000	MLR	At the present time the Bureau of Land Management does not anticipate the need for consulting services; however, the $15,000 will provide for obtaining, on a short-term basis, decisive expert advice not available within the Department or other agencies of the Federal Government for priority policy issued in the management of land and resources.

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

LAND ACQUISITION

Proposed Rescission

The 1984 Second Supplemental Appropriation Act provided $4,500,000 for work and equalization payments on exchanges associated with the Navajo/Hopi relocation project. The work on this project is expected to be completed during 1986. An evaluation of funds expended to date and remaining needs has revealed a balance of $3,000,000 being excess to Bureau needs. A $3,000,000 rescission of unobligated balances in Land Acquisition is, therefore, proposed.

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
LAND ACQUISITION
(Rescission proposal)
Program and Financing (in thousands of dollars)

Identification code 14-5033-5-1-302	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
10.00 Total obligations................	---	-3,000	---
Financing:			
23.40 Unobligated balance rescinded....	---	3,000	---
39.00 Budget authority (appropriation rescission proposal R86-)	---	---	---
Relation of obligations to outlays:			
71.00 Obligations incurred, net........	---	-3,000	---
90.00 Outlays......................	---	-3,000	---
(Mono cost: 21.5)	(Mono cost: 5)	(Mono cost: 5)	(Mono cost: 4.5)

NEW ODD PAGE

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUDGET JUSTIFICATIONS, F. Y. 1987

March 3, 1849

NOTICE: These budget justifications are prepared for the Interior and Related Agencies Appropriations Subcommittees. Approval for release of the justifications prior to their printing in the public record of the Subcommittee hearings may be obtained from the Subcommittees through the Office of Budget of the Department of the Interior.

FISH AND WILDLIFE SERVICE

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

FISCAL YEAR 1987 BUDGET JUSTIFICATIONS

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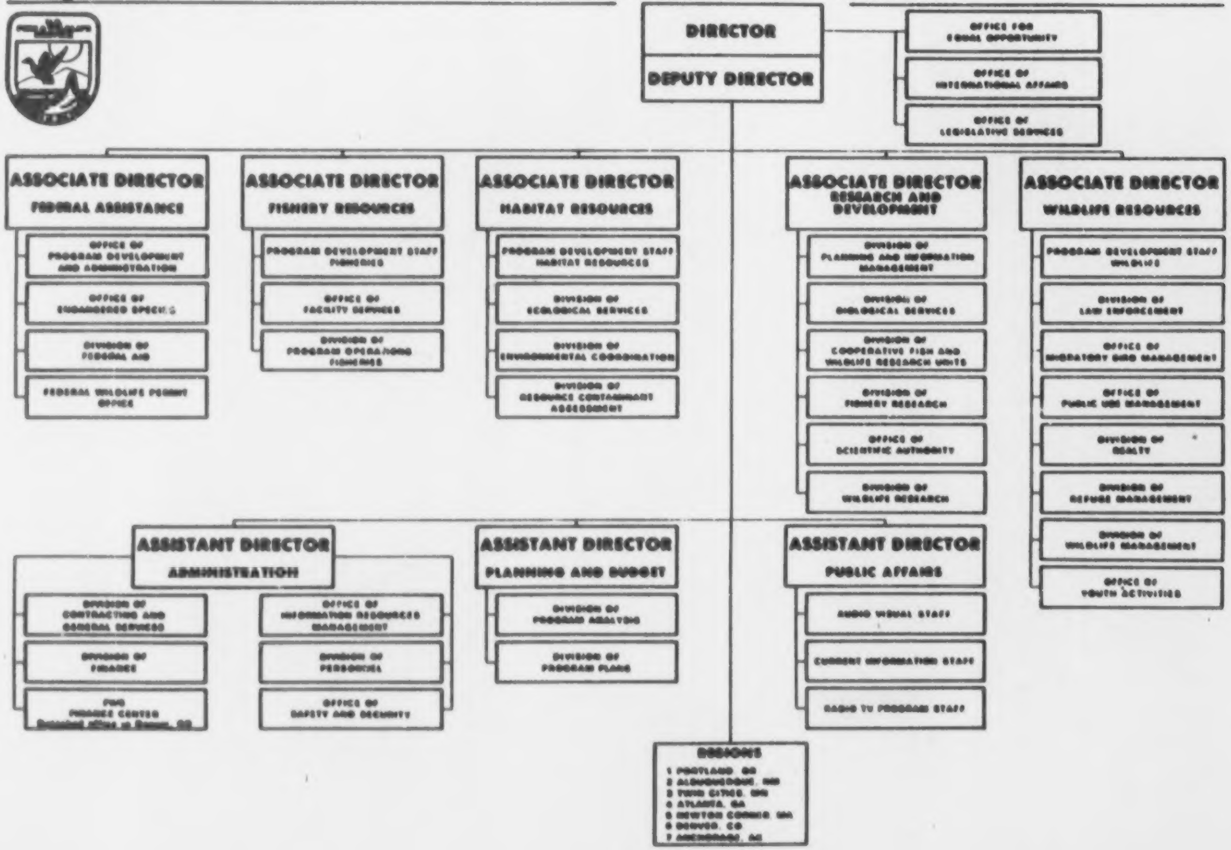
Organization

U.S. Fish and Wildlife Service


DIRECTOR
DEPUTY DIRECTOR
OFFICE FOR EQUAL OPPORTUNITY
OFFICE OF INTERNATIONAL AFFAIRS
OFFICE OF LEGISLATIVE SERVICES
ASSOCIATE DIRECTOR FEDERAL ASSISTANCE
OFFICE OF PROGRAM DEVELOPMENT AND ADMINISTRATION
OFFICE OF ENDANGERED SPECIES
DIVISION OF FEDERAL AID
FEDERAL WILDLIFE PERMIT OFFICE
ASSOCIATE DIRECTOR FISHERY RESOURCES
PROGRAM DEVELOPMENT STAFF FISHERIES
OFFICE OF FACILITY SERVICES
DIVISION OF PROGRAM OPERATIONS FISHERIES
ASSOCIATE DIRECTOR HABITAT RESOURCES
PROGRAM DEVELOPMENT STAFF HABITAT RESOURCES
DIVISION OF ECOLOGICAL SERVICES
DIVISION OF ENVIRONMENTAL COORDINATION
DIVISION OF RESOURCE CONTAMINANT ASSESSMENT
ASSOCIATE DIRECTOR RESEARCH AND DEVELOPMENT
DIVISION OF PLANNING AND INFORMATION MANAGEMENT
DIVISION OF BIOLOGICAL SERVICES
DIVISION OF COOPERATIVE FISH AND WILDLIFE RESEARCH UNITS
DIVISION OF FISHERY RESEARCH
OFFICE OF SCIENTIFIC AUTHORITY
DIVISION OF WILDLIFE RESEARCH
ASSOCIATE DIRECTOR WILDLIFE RESOURCES
PROGRAM DEVELOPMENT STAFF WILDLIFE
DIVISION OF LAW ENFORCEMENT
OFFICE OF MIGRATORY BIRD MANAGEMENT
OFFICE OF PUBLIC USE MANAGEMENT
DIVISION OF REALTY
DIVISION OF REFUGE MANAGEMENT
DIVISION OF WILDLIFE MANAGEMENT
OFFICE OF YOUTH ACTIVITIES
ASSISTANT DIRECTOR ADMINISTRATION
DIVISION OF CONTRACTING AND GENERAL SERVICES
DIVISION OF FINANCE
FWS FINANCE CENTER
OFFICE OF INFORMATION RESOURCES MANAGEMENT
DIVISION OF PERSONNEL
OFFICE OF SAFETY AND SECURITY
ASSISTANT DIRECTOR PLANNING AND BUDGET
DIVISION OF PROGRAM ANALYSIS
DIVISION OF PROGRAM PLANS
ASSISTANT DIRECTOR PUBLIC AFFAIRS
AUDIO VISUAL STAFF
CURRENT INFORMATION STAFF
RADIO TV PROGRAM STAFF
REGIONS
1 PORTLAND, OR
2 ALBUQUERQUE, NM
3 TWIN CITIES, MN
4 ATLANTA, GA
5 NEWTON CORNER, MA
6 DENVER, CO
7 ANCHORAGE, AK

General Statement

The year 1871 marked the beginning of Federal involvement in fish and wildlife conservation with the establishment of the Bureau of Fisheries, which initially was placed in the Department of Commerce. A second predecessor agency--the Bureau of Biological Survey--was established in 1885 in the Department of Agriculture. The two bureaus were transferred to the Department of the Interior in 1939 and then consolidated into the U.S. Fish and Wildlife Service. Laws pertaining to the Fish and Wildlife Service are codified in Title 16 of the United States Code.

The mission of the Fish and Wildlife Service is to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of people. The Service is concerned with the welfare of fish and wildlife and the preservation of their habitats. The Service has principal responsibility and authority for migratory birds, threatened and endangered species, certain marine mammals, and lands under Service control.

Traditionally, the Service has been involved in such core activities as research on fish and wildlife, development and management of the 90- million-acre National Wildlife Refuge System and the National Fish Hatchery System, migratory bird management, endangered species protection, law enforcement, and consultation on water resource development projects. As the field of wildlife management has grown more sophisticated and expanded into an appreciation of the ecological factors that determine fish and wildlife production, the Service isinvolved in water and energy related projects. This approach to conserving fish and wildlife resources is an effective national program for fish and wildlife resource protection, enhancement, and conservation.

The Service is composed of a headquarters office in Washington, D.C., regional offices, and a variety of other field units and installations. The Service also is responsible for a National Wildlife Refuge System consisting of 433 refuges, 152 waterfowl production areas, and 58 wildlife management areas. The facilities managed by the Service for the benefit of fishery resources include 73 hatcheries, 5 development centers, and a national training school. In 1986, National Fish Hatcheries are expected to produce 157 million fish (over 5.8 million pounds) for release into the Great Lakes, coastal rivers and streams, and inland reservoirs, lakes and streams. The Service also conducts fish and wildlife research at 11 laboratories. In addition to these management and research responsibilities, the Service operates a nationwide network of wildlife law enforcement agents.

Grants-in-aid administered by the Service will total $256 million in 1987 for the Sport Fish Restoration and Wildlife Restoration programs. Three smaller aid programs, Alaska subsistence grants, endangered species Section 6 grants, and Anadromous Fish Grants are proposed for termination at a savings of $7.4 million in appropriated funds.

The Service will provide $330,000 in both 1986 and 1987 to support the President's Commission on Americans Outdoors. This Commission has been established to examine and evaluate recreation policy and operations provided by all levels of the government.

Resource Management

CONTAMINANTS: The Service is continuing to be actively involved in monitoring the build-up and evaluating the effects of environmental contaminants resulting from agricultural and industrial development on fish and wildlife resources and their habitats. FY 1987 will continue the increased emphasis placed on evaluating and monitoring the effects of pollutants and other toxic substances begun in FY 1985 and continued in FY 1986. Increases totaling $1.3 million are to continue research and monitoring in this important area. Site specific efforts will address contaminants affecting a number of major geographic areas including the Central Valley area of California, Upper Mississippi River area, Great Lakes, and Alaska tundra habitats. Several studies are proposed that will evaluate the effects of point and non-point sources of pollution on fish and wildlife resources and habitats. This is an especially important area since high quality habitat is at a premium, and may in fact be deteriorating due to industrial and agricultural pollutants. Other areas of emphasis in these studies include the effects of contaminants in water and sediments on estuarine areas, especially those that have been disturbed by storms, dredging, or other activities. An additional $900,000 is proposed for scientific equipment to analyze contaminant field samples and enhanced computer data storage capacity at the Patuxent Wildlife Research Center.

REFUGE OPERATIONS: To meet important needs on national wildlife refuges, the Service is requesting increases of $2.4 million for operational activities. Over $1.6 million of this increase will be used for management of 24 newly established or recently expanded refuges, many of which were established for the protection of endangered species. The remaining amount will support such activities as management, fencing or posting, habitat management, and general operational activities on existing refuges. This increase is offset in part by requested decreases of $838 thousand for several short term activities including preparation of educational materials concerning Arctic nesting geese, rehabilitation of visitor facilities, and quantification of refuge water rights.

The Accelerated Refuge Maintenance Management (ARMM) thrust was initiated in 1984 to address serious maintenance needs on national wildlife refuges. Substantial progress has been made through this program and the two-year Jobs Bill funding, allowing the Service to request a decrease of $9.3 million for maintenance needs. A funding level of $8.8 million will be retained in FY 1987 to undertake highest priority projects.

The following summary provides a comparison between the 1986 appropriations and the FY 1987 request:

Appropriations	FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Estimate	Inc(+) or Dec(-) from Enacted	Permanent Employment 12/31/85
Resource Management	[illegible]	[illegible]	[illegible]	[illegible]	
FTE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Construction	[illegible]	[illegible]	[illegible]	[illegible]	
FTE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Land Acquisition	[illegible]	[illegible]	[illegible]	[illegible]	
FTE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Migratory Bird Conservation Account	[illegible]	[illegible]	...	[illegible]	
National Wildlife Refuge Fund	[illegible]	[illegible]	[illegible]	[illegible]	
Subtotal, Appropriations Requested	[illegible]	[illegible]	[illegible]	[illegible]	
FTE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Proposed 1986 Rescission	[illegible]	[illegible]	...	[illegible]	
Permanents and Trusts	[illegible]	[illegible]	[illegible]	[illegible]	
FTE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
All Other FTE's	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	
FTE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Highlights of the FY 1987 Request

Within the 1987 request of $[illegible] million, the Service will address nationally significant resource concerns while limiting expenditures in areas where substantial progress has been achieved.

Program increases totaling $[illegible] million are requested in the Service's principal operating account to accelerate the identification and evaluation of impacts of environmental contaminants on fish and wildlife resources and to restore declining waterfowl populations through enhanced waterfowl management.

Although no funds are requested from the Land and Water Conservation Fund, acquisition of important areas of migratory waterfowl habitat will continue with an estimated $[illegible] million receipts from the sale of Migratory Waterfowl Hunting and Conservation Stamps. The budget supports proposals to raise the price of "duck stamps" to $10 in 1987 which would provide for the protection of [illegible] acres as national wildlife refuges or waterfowl production areas.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Management Initiatives

Management initiatives implemented in fiscal year 1986 to improve the effectiveness and efficiency of Service management and administration will be expanded to result in savings of $2.0 million. Increased use of automated technology, including word processors, microcomputers, electronic mail systems, and computerized information systems, will result in substantial savings as equipment purchased in prior years is adapted to expanded activities and personnel become familiar with potential applications. Other activities that will contribute to this initiative include co-location of field offices, identification of opportunities to contract work outside the agency, and continuation of Section 2901 reductions such as travel and consultant. In addition the Service is proposing a base reduction of $1.2 million associated with the replacement of vehicles.

Construction

Continued dam safety and improved abilities in project design are the focus of the 1987 construction request. Funds for dam safety include inspections and emergency action planning ($360,000), final design for spillway rehabilitation on two dams ($1,200,000), and modification to alleviate safety deficiencies identified at two dams ($1,750,000).

Advance Planning funding requested in 1987 will be used to acquire a computer aided drafting/design system to improve technical and drafting productivity and provide wider and more consistent use of standardized engineering designs ($325,000).

Land Acquisition

In 1987 the Service is requesting $1.5 million to support land acquisition management activities. Emphasis will be placed on completing acquisition of projects funded by prior appropriations and on non-purchase alternatives, such as exchanges and donations or cooperative agreements that provide land protection without substantial commitment of Federal funds. During the five-year period from 1981 to 1985, approximately $143.5 million has been obligated from the Land and Water Conservation Fund to acquire 167,896 acres of refuge land. Donations of land during the same period totalled 137,308 acres.

Migratory Bird Conservation Account

Receipts from the sale of an estimated 1.82 million Migratory Bird Hunting and Conservation Stamps will provide funding to acquire approximately 24,800 acres for national wildlife refuges and waterfowl production areas in 1987. Funding estimates of $16.3 million are based on a proposal to raise the price of the duck stamp to $10 and an estimated other receipts, primarily for rights-of-way, of $300,000. More than 225,000 acres of important migratory bird habitat have been acquired between 1981 and 1985 with obligations of $108.5 million from the Migratory Bird Conservation account.

National Wildlife Refuge Fund

The Service is requesting direct appropriations of $5.6 million in FY 1987 for payments in lieu of taxes. Net receipts of $4.6 million from sales in 1986 of timber, grazing privileges, oil, gas, minerals, and other fees will supplement the direct appropriations and provide payments to counties of approximately $10.2 million.

Permanents and Trusts

Grants-in-aid from the Federal Aid in Wildlife Restoration Account are made to the States, Puerto Rico, Guam, the Virgin Islands, the Northern Mariana Islands and American Samoa for the management of wildlife resources and for the conduct of State hunter education programs. Because of reporting delays on the part of industry and a one-time adjustment by IRS in reporting receipts in 1986, the amounts reflected are slightly inflated over the anticipated annual collections. The 1987 estimate of $95.0 million reflects a conservative estimate of receipts based on historical wide variations that have occurred in the account. The States' proportional share of funds will be increased as a result of limiting Federal administrative funds to $2 million. The reduction in Federal administrative funds will decrease the level of support for administrative overhead and for the National Survey of Fishing, Hunting, and Wildlife Associated Recreation.

Proceeds from sales are receipts collected from the sale of products from refuges established as overlay projects on Corps of Engineers land and used to cover expenses of producing the products and for managing wildlife habitat.

The FY 1985 Interior and Related Agencies Appropriation Act (P.L. 98-473) provides that all rents and charges collected for the use or occupancy of quarters shall be deposited in a special fund for the maintenance and operation of the quarters where the funds are collected. An increase in receipts is anticipated as a result of adjustments to rental rates and increased occupancy.

Sport Fish Restoration Account

The FY 1987 grants to States for management of sport fish resources, also known as the Dingell-Johnson or D-J Program will be an estimated $161 million including receipts from excise taxes on fishing equipment, motorboat fuel taxes, and import duties on yachts and pleasure boats. The level of funds used for administrative and overhead expenses will be limited to $2.0 million, the same level as described for Federal Aid-Wildlife Restoration, thus increasing the States' proportional share of funds.

FY 1986 Rescission

Along with the 1987 budget, the Service is proposing a rescission to the 1986 land acquisition budget of $4.9 million. The reduction will be made to two projects:

-951,000	Bon Secour, LA
-4,000,000	Tortuguero Lagoon, P.R.
-4,951,000	

Federal acquisition at Tortuguero Lagoon is no longer necessary because satisfactory agreements have been negotiated with the Commonwealth of Puerto Rico to protect the unique wildlife ecosystems of the lagoon.

The primary species protected at Bon Secour refuge is the Alabama beach mouse. The majority of the critical habitat identified for this species has been purchased and further acquisition is not necessary at this time.

Appropriation Summary Statement

Appropriation: Resource Management

This is the basic operating appropriation that enables the Service to administer a national program to provide opportunities to the American public to appreciate, conserve, and widely use fish and wildlife resources. The Service operates 433 national wildlife refuges, 73 fish hatcheries and related production and training facilities, and 11 research laboratories.

The major activities financed by this appropriation are:

1. Habitat Resources. Analytical techniques and methodologies are developed and recommendations made to prevent or minimize adverse environmental effects resulting from land and water development projects. To understand ecological relationships, fish and wildlife are monitored to determine the presence and effects of environmental contaminants.

2. Wildlife Resources. Top carry out its responsibilities, the Service administers an extensive wildlife refuge system, directs and coordinates national migratory bird programs and certain aspects of the Marine Mammal Protection Act, enforces Federal game laws, and conducts research to improve wildlife management capabilities. The Service also administers an interpretation and recreation program to expand public understanding of fish and wildlife resources.

3. Fishery Resource. The Service assists in the development and management of interstate and international fisheries through operation of a national fish hatchery system, conduct of research and training to improve sport fish productivity, and cooperative efforts with Indian tribes and Federal and State agencies in the management of fisheries.

4. Endangered Species. To prevent species from becoming extinct and to return them to the point where they are no longer threatened, the Service: (a) identifies and lists species that are endangered or threatened; (b) provides protection from taking, trade, importation and exportation, and adverse alteration of their critical habitat; and (c) implements recovery programs for individual species, including operation of refuges.

5. General Administration. This activity provides overall policy formulation, direction, and administration for all matters related to the effective execution of fish and wildlife programs and operations. The two components of this activity are: (a) executive direction - providing Servicewide management ensuring the effective performance in achieving Service goals and objectives, and (b) administrative and related support services - providing essential staff and support services including personnel, accounting, fiscal and financial activities, as well as contracting, telecommunications, space, central services related to payroll, supply, and mail.

The total appropriation requested for FY 1987 is $285,127,000 which includes net base adjustments of $+10,115. These adjustments include an adjustment for cancellation of budget authority under P.L. 99-177, management initiatives, vehicle purchases, and administrative costs such as space charges, unemployment compensation, and employees' compensation.

Program changes, resulting in a net decrease of $11,517,000 are distributed as follows:

Habitat Resources ($+1,953,000)

- Field Operations:

  Provide pre-development consultation activities in high priority areas where protection of existing wetland habitats can be increased by offering expert consultation prior to formal project planning or permit and license application (+280,000).

  Increase analysis and evaluation of contaminants affecting fish and wildlife habitats especially those utilized by wintering and nesting waterfowl and anadromous fish as well as major wetland habitat types (+696,000).

  Develop additional data concerning location, transport and environmental disposition of point and non-point source pollutants for use in developing management programs that are effective in protecting fish and wildlife and their habitats from contaminant stress (+257,000).

- Research and Development

  Replace outdated equipment, including two mass spectrometers, for use in chemical analysis and in support of efforts to identify nationwide trends, problems, and unanswered research questions related to contaminants (+900,000).

  Expand studies on the impact of contaminated sediments on fish and and wildlife to include estuarine areas, emphasizing areas where sediments have been disturbed through dredging, storms, or other activities (+320,000).

  Reduce federal involvement in biological effects studies of State acid precipitation demonstration projects (-500,000).

Wildlife Resources ($-4,980,000)

- Refuge Operations and Maintenance

  Provide operational funds for 24 national wildlife refuges and waterfowl management districts that have recently been established or expanded (+1,646,000)

  Increase operational funding for existing refuges including general operational requirements, implementation of fishery resource management plans, monitoring efforts to identify potential water quality and other contaminant problems, and development of Alaska refuge management plans (+730,000).

  Complete in 1986 teacher training program and purchase of educational materials needed to accelerate an information program on the Yukon Delta about Arctic nesting geese (-298,000).

Continue identification and quantification of refuge water rights at a reduced level (-142,000).

Achieve a sufficient level of progress from 1984 to 1986 in addressing serious maintenance deficiencies through the ARMM program to address continuing maintenance requirements at a reduced funding level (-9,489,000).

Complete in 1986 rehabilitation of visitor facilities on the Kenai NWR (-378,000).

° Population Management

Increase waterfowl production both on and off-Service lands through extension efforts to encourage protection of wetland habitat on private lands, installation and maintenance of artificial nesting structures, and evaluation of regulation changes on production and harvest (+2,000,000).

Continue activities in support of the Western Convention at the 1985 level (-109,000).

° Research and Development

Conduct research studies to address non-hunting of waterfowl, including disease studies, determine causes of mortality, including predation, disease, and loss of habitat, improve methods for estimating waterfowl populations, and develop and validate population models needed to evaluate potential waterfowl management techniques (+3,051,000).

Continue data collection for information required for polar bear management at a reduced level (-297,000).

Defer further development of improved techniques for censusing walrus (-199,000).

Discontinue efforts to develop an alternative to steel as a nontoxic shot (-596,000).

Withdraw federal funding for a southeastern wildlife disease study that is of primary benefit to State-operated wildlife programs (-225,000).

Provide increased funding for maintenance and rehabilitation needs at three wildlife research laboratories (+300,000).

° Alaska Subsistence Grants

Eliminate Federal funding for the subsistence program conducted by the State of Alaska (-974,000).

Fishery Resources ($-1,603,000)

° Hatchery Operations and Maintenance

Transfer to state operation or close six national fish hatcheries and one field station and eliminate production related to stocking of private waters (-921,000).

Reduce interpretation and recreation activities by closing aquarium/visitor facilities at six hatcheries (-154,000).

Complete one-time hatchery maintenance projects and return maintenance funding to 1985 level (-994,000).

° Lower Snake River Compensation Plan
Provide full funding at six State and two Federal fishery compensation hatcheries to meet production and stocking requirements of the plan (+809,000).

° Population Management
Identify, review, and quantify fishery resource-related mitigation requirements to ensure that mitigation responsibilities are met in the most cost-effective manner (+214,000).

° Research and Development
Provide annual assessment data on fish stocks in support of a Court-ordered settlement on Indian fishing rights in the Great Lakes (+110,000).

Complete purchase of laboratory and field equipment at the Gainesville research laboratory in 1986 (-149,000).

Effect savings from one-time maintenance projects and equipment replacement at fishery research laboratories (-248,000).

Discontinue lower priority research activities related to aquaculture demonstration projects at the National Fishery Center, Leetown, West Virginia (-200,000).

Complete purchase of acid rain monitoring equipment at Wellsboro research laboratory (-70,000).

Endangered Species ($-6,737,000)

° Listing
Use information gathered in expanded status surveys during 1986 to prepare listing packages (-249,000).

° Law Enforcement
Provide operational funding for forensics lab from fees collected for import/export inspections (-1,093,000).

Successful completion of education campaign concerning hunting of doves and Puerto Rican plain pigeon will allow a reduction (-50,000).

Complete acquisition and training related to an improved system for maintaining CITES permits (-50,000).

° Recovery
Monitoring effects of fox eradication on Kiska Island for Aleutian Canada goose recovery will require less intensive effort (-148,000).

Complete fencing of Hawaiian rain forest habitat to provide protection from feral pigs (-74,000).

Complete data collection and analysis on whooping crane behavior (-50,000).

Conclusion of research projects on Andean condors and telemetry development and other projects related to California condor will allow a decrease in funding (-298,000).

Sufficient progress has been achieved in production and rearing of captive peregrine falcons to permit decrease in Federal funding (-149,000).

Preparation of final reports related to four grizzly bear studies can be accommodated at reduced funding level (-25,000).

Recovery of the California brown pelican is progressing and monitoring efforts can be reduced (-10,000).

° Research and Development
Contract studies of whooping cranes will be conducted over a two year period and will not require further funding (-99,000).

One-time funding for establishing a captive breeding facility for black-footed ferret will not be required (-49,000).

° Cooperation with States
Terminate program of grants to States for endangered species activities (-4,393,000).

General Administration ($-150,000)

° Executive Direction
Eliminate funding support for the Fish and Wildlife Foundation which is expected to be self-sustaining by 1987 (-150,000).

U.S. Fish and Wildlife Service
Resource Management

For expenses necessary for scientific and economic studies, conservation, management, investigations, protection, and utilization of sport fishery and wildlife resources, except whales, seals, and sea lions, and for the performance of other authorized functions related to such resources; for the general administration of the United States Fish and Wildlife Service; and for maintenance of the herd of long-horned cattle on the Wichita Mountains Wildlife Refuge; [and not less than $3,300,000 for high priority projects within the scope of the approved budget which shall be carried out by Youth Conservation Corps as if authorized by the Act of August 13, 1970, as amended by Public Law 93-408 [$301,222,000] $285,127,000 [of which $4,420,000 to carry out the purposes of 16 U.S.C. 1535, shall remain available until expended and] of which [$5,665,000] $6,411,000 shall be for operation and maintenance of fishery mitigation facilities constructed by the Corps of Engineers under the Lower Snake River Compensation Plan, authorized by the Water Resources Development Act of 1976 (90 Stat. 2921), to compensate for loss of fishery resources from water development projects on the Lower Snake River, which will remain available until expended.

(7 U.S.C. 135k. 426. 442-45, 447-49: 16 U.S.C. 460 et seq.: 18 U.S.C. 41-42: 33 U.S.C. 610: 42 U.S.C. 1900: 43 U.S.C. 422h, 620g, 1601-1624; 87 Stat. 884; 88 Stat. 803; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Justification of Proposed Language Change

1. "and not less than $3,300,000 for high priority projects within the scope of the approved budget which shall be carried out be Youth Conservation Corps as if authorized by the Act of August 13, 1970, as amended by Public Law 93-408..."

The Service proposes to delete this language since Youth Conservation employees cannot substitute for maintenance professionals on Service facilities. Youth Conservation enrollees are only qualified to complete unskilled construction work which is often not a high priority of the Service.

Appropriation Language Citations

Fish and Wildlife Service

Appropriation: Resource Management

1. For expenses necessary for scientific and economic studies,

7 U.S.C. 426, 426b
16 U.S.C. 744-757, 760a-760c, 777-778c,
931-939c, 1051-1058, 1380, 1531-1543,
1361 et. seq
33 U.S.C. 610
42 U.S.C. 1900

7 U.S.C. 426, 426b provides for the conduct of investigations and tests necessary to determine and promulgate the best methods of eradicating injurious or dangerously diseased animals.

16 U.S.C. 744-757 provides for investigations and research into the factors that affect propogation, diminution of food fishes, and damages by predacious fishes, and establishment of fish and wildlife training programs at universities and colleges.

16 U.S.C. 760a-760c provides for the study for development and protection of Atlantic Coast fish.

16 U.S.C. 777-778c provides for cooperation between Federal government and State fish and game departments in fish restoration and management projects, and establishment of a fish research and experimental program.

16 U.S.C. 931-939c. The Great Lakes Fisheries Act of 1956 which includes establishment of United States representation on the Commission provided for by Article II of the Convention on Great Lakes Fisheries between the United States of America and Canada, and other provisions such as appointment of an advisory committee, acquisition of real property, rules governing construction and operation of lamprey works, and authority to transfer lamprey control projects and cooperation in the conduct of research and related activities.

16 U.S.C. 1051-1058 provides for an authorization to plan, construct, maintain and operate the National Fisheries Center and Aquarium for education, recreational, cultural, and scientific purposes.

16 U.S.C. 1380 authorizes the Secretary of the Interior to make grants or undertake research in subjects which are relevant to the protection and conservation of marine mammals.

16 U.S.C. 1531-1543 the Endangered Species Act of 1973 provides for the conservation, including research protection, restoration, and propogation of threatened and endangered species of fish, wildlife and plants.

16 U.S.C. 1361 et. seq the Marine Mammal Protection Act of 1972 provides for conservation and management for purposes of increasing and maintaining the number of animals within species and populations, moratorium on taking and importing marine mammals and marine mammal products, prohibitions on taking, and issuing regulations.

33 U.S.C. 610 provides for (1) a program including research to control obnoxious aquatic plant growth in the combined interest of navigation, fish and wildlife conservation, and other purposes; and (2) assisting the Administrator of the Environmental Protection Agency and the President in studying developing and issuing the latest scientific knowledge available of effects of pesticides in water, including investigation of methods to control the release of pesticides into the environment.

42 U.S.C. 1900 authorized the Secretary of the Interior to enter into research contracts related to the programs of the Department including those concerning fish and wildlife resources.

2. Conservation management, investigations

7 U.S.C. 442-5, 447-9
16 U.S.C. 460 -12, -17-18, 590a-590f, and
590p-1, 661-667e, 668dd-ee, 668ff-
668gg, 669-669i, 670a-o, 671-687a,
713-715s, 718-718h, 721-731, 742a-
754a, 760-760-12, 777-777k, 811, 831-
839, 1008, 1131-1136, 1223-1224;
2801-2810;
43 U.S.C. 422h, 620g, 1601-1627e

7 U.S.C. 442-5, 447-9 provides for the acquisition of grain to use in deterring damage by migratory water fowl and preventing their starvation.

16 U.S.C. 460 -12, 17-18 provides for (1) enhancement of migratory waterfowl refuges, and (2) in conjunction with certain water resources projects, construction, and operation of fish and wildlife recreation and enhancement facilities.

16 U.S.C. 590a-590f, 590p-1 provides for authorization of soil and moisture conservation measures, and prohibiting certain drainage important to wildlife conservation.

16 U.S.C. 661-667e gives fish and wildlife conservation equal consideration and coordination with other features of water resource development programs through effectual and harmonious planning, development, maintenance and coordination of wildlife conservation and rehabilitation (the Fish and Wildlife Coordination Act).

16 U.S.C. 668dd-ee provides for the administration of the National Wildlife Refuge System.

16 U.S.C. [illegible] establishes and designates the San Francisco Bay National Wildlife Refuge. (No longer in U.S. Code)

16 U.S.C. 669-669i authorizes the Secretary of the Interior to cooperate with the States through their respective fish and game departments in wildlife restoration projects.

16 U.S.C. 670a-o provides for fish and wildlife conservation on military reservations (Sikes Act).

16 U.S.C. 671-697a provides for game and wildlife preserves such as the National Bison Range and others.

16 U.S.C. 715-715s the Migratory Bird Conservation Act which establishes the Migratory Bird Conservation Commission and includes provisions for

construction, land acquisition, and participation of States in revenues from the National Wildlife Refuge System such as from sale of timber, hay and other products.

16 U.S.C. 718-718h provides for hunting stamps and other provisions of the Migratory Bird Hunting Stamp Act and includes the printing, sale and accounting for the stamps by the U.S. Postal Service.

16 U.S.C. 721-731 the Upper Mississippi River Wildlife and Fish Refuge Act.

16 U.S.C. 742a-754a provides for the establishment of the United States Fish and Wildlife Service.

16 U.S.C. 760-760-12 provides for the establishment of fish hatcheries in several States.

16 U.S.C. 777-777k provides for cooperation between Federal government and State fish and game departments in fish restoration and management projects, and establishment of a fish research and experimentation program.

16 U.S.C. 2801-2810 directs the Secretary of the Interior to participate in the development of a National Aquaculture Development Plan and establish research, development and other activities to encourage the development of aquaculture in the United States.

16 U.S.C. 3301-3, 3311-15, 3321-25, 3331-36, 3341-45 The Salmon Steelhead Conservation and Enhancement Act allows for improved management and enhancement planning and coordination among salmon and steelhead managers; will help prevent a further decline of salmon and steelhead stocks; and will assist in increasing the supply of these stocks within the Columbia River conservation area and the Washington conservation area.

16 U.S.C. 811 provides for a requirement to the Federal Energy Regulatory Commission construction, maintenance, and operation, of fishways to a licensee at his own expense.

[illegible]

[illegible]

[illegible]

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[illegible]

[illegible]

[illegible]

3. protection,

7 U.S.C. 135 k;
16 U.S.C. 668a-668d, 701-711, 1171-2
1182, 1361, 1362, 1371-1384, 1401-
1407, 1531-1543;
18 U.S.C. 41-42, 3054;

7 U.S.C. 135k provides for cooperation between departments and agencies under the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, which prohibits trafficking in certain unregistered poisons (economic poisons).

16 U.S.C. 668-668d provides for protection of the bald eagle and the golden eagle.

16 U.S.C. 703-712 prescribes penalties and regulations for the administration and enforcement of the Migratory Bird Treaties with Great Britain, Canada, Japan, the Soviet Union and Mexico and prescribes penalties and regulations.

16 U.S.C 1171-2 provides for protection of sea otters on the high seas pursuant to Subchapter III of the Fur Seal Act of 1966. Administered jointly by the Secretary of the Interior and Secretary of Commerce.

16 U.S.C. 1182 provides for joint responsibility in law enforcement among State and Federal officials and employees, and authority of the Secretary of the Interior to designate officers and employees of the states to enforce provisions of the Fur Seal Act of 1966 in which case they function as Federal law enforcement agents.

16 U.S.C. 1361, 1362, 1371-84, 1401-1407 The Marine Mammal Protection Act of 1972 provides for a Federal research and management responsibility over all marine animals.

16 U.S.C. 1531-1543 provides for the conservation, protection, restoration, and propagation of threatened and endangered species of fish, wildlife, and plants.

16 U.S.C. 3375 provides Federal enforcement authority under the Lacey Act. It provides authority for arrests, searches, and seizures in accordance with the Fourth Admendment to the Constitution and for the execution and service of warrants, subpoenas, and other documents. It also provides that the Federal District Court shall have jurisdiction over all actions arising under the Act, including judicial forfeiture proceedings under Section 5.

18 U.S.C. 41-42 provides (1) except as prescribed by the Secretary of the Interior, for prohibition of hunting, fishing, trapping, disturbance of injury to wildlife on refuges, importation of injurious animals, transport of illegally taken wildlife, and provides for labeling and for identifying packages containing wildlife transported in interstate or foreign commerce; and (2) provides for law enforcement powers for Section 42 of Title 18. Public Law 97-79 broadens the coverage of the present Lacey Act to include all fish and wildlife and their parts or products with an amendment to

include plants protected by the Convention on International Trade in Endangered Species and those protected by state laws designed to conserve species threatened with extinction. It repeals the present Black Bass Act and sections 43 and 44 of Lacey Act of 1900 (18 U.S.C. 43 and 44). Makes it unlawful to import, export, sell, receive, acquire, or purchase (1) fish, wildlife or plants taken or possessed in violation of U.S. or Indian law, or (2) import, export, etc. in interstate or foreign commerce any fish, wildlife, or plants taken possessed or sold in violation of State or foreign law.

4. and utilization of sport fishery and wildlife resources

16 U.S.C. 460k-460k-4
16 U.S.C. 460 -4-12
16 U.S.C. 460 -17-18
16 U.S.C. 1051-1058
43 U.S.C. 620g

16 U.S.C.460k-46-k-4 provides for authorization of recreational use of refuges and hatcheries.

16 U.S.C. 460 -4-12 provides for use of Land and Water Conservation Fund for land acquisition and for outdoor recreation.

16 U.S.C. 460 -17-18 provides for enhancement of migratory waterfowl refuges, and in conjunction with certain water resource water resource projects, construction and operation of fish and wildlife recreation and enhancement facilities.

16 U.S.C. 1051-1058 provides for authorization to plan, construct, maintain and operate the National Fisheries Center and Aquarium.

5. except whales, seals, sea lions

16 U.S.C. 1362

16 U.S.C. 1362 defines authority for marine mammals between the Secretary of Commerce and the Secretary of the Interior. The Secretary of Commerce has jurisdiction over all whales and porpoise and all pinipeds except the walrus. The Secretary of the Interior has jurisdiction over all other marine mammals, which include polar bears, sea and marine otters, manatees and dugongs, as well as walruses.

43 U.S.C. 620g provides that in connection with the Colorado River Storage Project that wildlife will be conserved, and facilities will be built and operated for public enjoyment and to mitigate losses of, and improve conditions for, fish and wildlife.

6. and for the performance of other authorized functions related to such resources

16 U.S.C. 661-667
16 U.S.C. 742a-742l

16 U.S.C. 661-667 provides for fish and wildlife conservation, equal consideration, coordination with other features of water resource development programs through effectual and harmonious planning, development, maintenance, and coordination of wildlife conservation and rehabilitation (the Fish and Wildlife Conservation Act) and

7. for the general administration of the Fish and Wildlife Service

16 U.S.C. 742a-742l provides for the establishment of the United States Fish and Wildlife Service (742b(b)).

8. and maintenance of the herd of long-horned cattle on the Wichita Mountains Wildlife Refuge.

No specific authority.

As a provision of the Agriculture Appropriation Act (49 Stat. 1446) June 1936, jurisdiction over the Wichita was transferred to the Bureau of Biological Survey (the forerunner bureau to the Fish and Wildlife Service) and renamed "Wichita Mountain Wildlife Refuge." The appropriation act further provided that "1,000 may be used for the maintenance of the long horned cattle ..." Since the original herd was established by appropriation act, it was assumed that the long horns would continue to be a part of the Wichita and lacking legislative authorization other than by appropriation act this clause has been retained in the Service's appropriation language.

Need for Unauthorized Language

Without authorization, the long-horned cattle at Wichita Mountain Wildlife Refuge will have to be removed from the refuge. At present, this herd represents a gradual development over many years of an unadulterated gene pool necessary to insure perpetuation of this symbol of our national heritage. Its importance is further increased by its being essentially free of brucelosis or other bovine diseases.

The public has access to viewing the animals in their natural state on the refuge, giving pleasure and a sense of historical meaning to each visitor. Without authorization, the public will be denied this opportunity.

Fish and Wildlife Service
Activity/Subactivity Change Crosswalk - Fiscal Year 1986 Request
(in thousands of dollars)

Format of Fiscal Year 1986 Congressional Budget Submission		Format of Fiscal Year 1986 Congressional Budget Submission	
Appropriation/Activity/Subactivity	Amount 1986 Request *	Appropriation/Activity/Subactivity	Amount 1986 Request
Resource Management	286,529	Resource Management	286,529
Habitat Resources	45,727	Habitat Resources	45,727
Wildlife Resources	129,207	Wildlife Resources **	129,207
Refuge Operations and Maintenance	101,012	Refuge Operations and Maintenance	101,012
Law Enforcement and Protection	9,562	Law Enforcement and Protection	9,562
Payment of Rewards	[250]		
Population Management	7,030	Population Management	7,030
Research and Development	10,671	Research and Development	10,671
Alaska Subsistence Grants	932	Alaska Subsistence Grants	932
Fishery Resources	48,395	Fishery Resources	48,395
Endangered Species	28,991	Endangered Species	28,991
General Administration	34,209	General Administration	34,209

* Requested amount reflects reduction pursuant to PL 99-177.

** Payment of Rewards in Fiscal Year 1986 will be included as an offsetting collection and counted with reimbursable budget authority.

Fish and Wildlife Service
Activity/Subactivity Change Crosswalk - Fiscal Year 1987 Request
(in thousands of dollars)

Format of Fiscal Year 1986 Congressional Budget Submission		Format of Fiscal Year 1987 Congressional Budget Submission	
Appropriation/Activity/Subactivity	Amount 1987 Request	Appropriation/Activity/Subactivity	Amount 1987 Request
Resource Management	285,127	Resource Management	285,127
Habitat Resources	49,072	Habitat Resources	49,072
Wildlife Resources	128,223	Wildlife Resources *	128,223
Refuge Operations and Maintenance	96,275	Refuge Operations and Maintenance	96,275
Law Enforcement and Protection	9,708	Law Enforcement and Protection	9,708
Payment of Rewards	[250]		
Population Management	9,180	Population Management	9,180
Research and Development	13,060	Research and Development	13,060
Alaska Subsistence Grants	...	Alaska Subsistence Grants	...
Fishery Resources	48,039	Fishery Resources	48,039
Endangered Species	23,160	Endangered Species	23,160
General Administration	36,633	General Administration	36,633

* Payment of Rewards in Fiscal Year 1986 will be included as an offsetting collection and counted with reimbursable budget authority.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Resource Management

Page No.	Summary of adjustments to base and built-in changes:	Amount	FTE-T	Amount
	FY 1986 Adjusted Appropriation		5,374	286,529
	(1) Adjustments for 1986 P.L. 99-177 B.A Cancellations		...	+12,886
	(2) Anticipated savings from management initiatives			-1,989
	(3) Transfers (between accounts)			
	BLM Fire Management Tranfer.....................			+ 340
	(4) Other increases and/or decreases			
	Employees' Compensation Fund....................	+ 378		
	Unemployment Compensation Payments..............	+ 148		
	GSA space cost increase	+ 552		
	Motor Vehicle reduction.........................	- 2,200		
	Net, other increases and/or decreases...........			- 1,122
	1987 Base Budget...................................			296,664
	Program changes (changes to base budget detailed below)		- 50	-11,517
	Total requirements (1986 Estimate)....................		5,324	285,127

Comparison By Activities/Subactivities	1985 Actual		1986 Enacted To Date		P.L.99-177 Reduction	1986 Adjusted Appro-priation	1987 Base		1987 Estimate		Inc(+)/Dec(-) From 1986 Appropriation		Inc(+)/Dec(-) From 1986 Adjusted Appropriation	Inc(+)/Dec(-) Over 1987 Base	
	FTE-T	Amount	FTE-T	Amount			FTE-T	Amount	FTE-T	Amount	FTE-T	Amount		FTE-T	Amount
Habitat Resources															
Field Operations	485	23,975	485	22,305	-960	21,345	485	21,934	485	23,167	...	862	1,822	...	1,233
NWR	41	5,415	41	5,346	-231	5,115	41	5,313	41	5,313	...	-33	198	...	...
Research & Development	305	15,393	305	15,467	-665	14,802	305	15,308	305	16,028	...	561	1,226	...	720
Coop Units	80	4,692	80	4,665	-200	4,465	80	4,566	80	4,566	...	-101	99	...	...
Subtotal	911	49,475	911	47,783	-2,056	45,727	911	47,119	911	49,072	...	1,289	3,345	...	1,953
Wildlife Resources															
Refuge O&M	2,009	101,372	2,105	105,554	-4,542	101,012	2,105	104,206	2,055	96,275	-50	-9,279	-4,737	-50	-7,931
IE & Protection	195	10,073	195	10,004	-442	9,562	195	9,708	195	9,708	...	-296	146	...	...
Population Management	363	22,730	149	7,346	-316	7,030	149	7,289	149	9,180	...	1,834	2,150	...	1,891
Research & Development	272	12,336	190	11,150	-479	10,671	190	11,026	190	13,060	...	1,910	2,389	...	2,034
Alaska Subsistence	...	980	...	974	-42	932	...	974	...	...	...	-974	-932	...	-974
Subtotal	2,839	147,491	2,639	135,028	-5,821	129,207	2,639	133,203	2,589	128,223	-50	-6,805	-984	-50	-4,980
Fishery Resources															
Hatchery O&M	496	24,843	494	26,347	-1,134	25,213	494	25,930	494	23,861	...	-2,486	-1,352	...	-2,069
ISRCF	16	4,495	16	5,631	-242	5,389	16	5,602	16	6,411	...	780	1,022	...	809
Refuge O&M	35	2,182	35	2,164	-93	2,071	35	2,168	35	2,168	...	-16	-77	...	...
IE & Protection	42	2,128	42	2,153	-93	2,060	42	2,075	42	2,075	...	-78	15	...	...
Population Management	50	1,768	55	2,149	-92	2,057	55	2,071	55	2,285	...	136	228	...	214
Research & Development	250	11,083	255	12,127	-522	11,605	255	11,816	255	11,259	...	-868	-346	...	-557
Subtotal	887	46,499	895	50,571	-2,176	48,395	895	49,662	895	48,059	...	-2,532	-356	...	-1,603
Endangered Species															
Listing	58	2,955	58	3,210	-139	3,071	58	3,186	58	2,937	...	-273	-134	...	-249
IE & Protection	151	7,325	156	8,648	-372	8,276	156	8,433	156	7,240	...	-1,408	-1,036	...	-1,193
Consultation	74	2,592	74	2,614	-112	2,502	74	2,588	74	2,588	...	-26	86	...	...
Recovery	58	6,143	59	6,884	-296	6,588	59	6,784	59	6,030	...	-854	-558	...	-754
Research & Development	65	4,142	65	4,545	-195	4,350	65	4,513	65	4,365	...	-180	15	...	-148
Coop with States	...	3,920	...	4,393	-189	4,204	...	4,393	...	...	...	-4,393	-4,204	...	-4,393
Subtotal	406	27,077	412	30,294	-1,303	28,991	412	29,897	412	23,160	...	-7,134	-5,831	...	-6,737
General Administration															
Executive Director	148	7,501	148	7,456	-314	7,142	148	7,456	148	7,306	...	-150	164	...	-150
Administrative Services	398	12,147	369	10,251	-441	9,810	369	10,217	369	10,217	...	-34	407	...	...
Related S. Services	...	18,248	...	18,032	-775	17,257	...	19,110	...	19,110	...	1,078	1,853	...	...
Subtotal	546	37,896	517	35,739	-1,530	34,209	517	36,783	517	36,633	...	894	2,424	...	-150
Total Requirements	5,589	308,438	5,374	299,415	-12,886	286,529	5,374	296,664	5,324	285,127	-50	-14,288	-1,402	-50	-11,517

Justification of Adjustments to Base and Built-in Changes
(Dollar amounts in thousands)

(1) Adjustment for FY 1986 P.L. 99-177 B.A...................+12,886
The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-777) requires a 4.3 percent reduction in non-exempt progrmas in FY 1986. Since the 4.3 percent reduction applies to FY 1986 only, this adjustment is made to allow a more comparable basis for showing program changes from FY 1986 to FY 1987.

(2) Anticipated savings from management initiatives. ....-1,989
In FY 1987 certain management initiatives will be conducted to improve cost effectiveness and performance of the Service's management and support functions. The FY 1987 base reflects a reduction in funding of $1,122,000 resulting from management savings initiatives, in the area of:

--Streamling
--Consolidations
--Publications and Printing

(3) Transfer (between accounts):
Transfer from the BLM, Management of Lands and Resources Accounts, reflected to fire management activities in Alaska. This funding transferred from BLM budget to the Fish and Wildlife Service Budget in FY 1987, reducing the former by $340,000 and increasing the latter by $340,000.......................$ +340

(4) Other increase and/or decreases:

o Employees' Compensation Fund..........................$ +378
The increase in the repayment to the Employees' Compensation Fund is the result of higher costs for compensation to insured employees. These charges will be reimbursed to the Department of Labor. Employees' Compensation Fund with FY 1987 funds pursuant to Public Law 94-273.

o Unemployment compensation payments....................$ +148
The increase in payment to the Federal Employment Compensation Account (FECA) is the result of higher costs for unemployment compensation payments. These charges will be reimbursed to the Department of Labor, Federal Employment Compensation Fund, in 1987 pursuant to Public Law 94-499.

o Rent payment to GSA (SLUC)............................$ +552
The increase is a result of a Fair Annual Rental (FAR) Appraisal conducted by the GSA. The 1987 estimates of $12,403,000 is an increase over the 1986 estimate of $11,851,000.

o Motor Vehicle Reduction...............................$-2,200
This adjustment reflects a decision not to purchase new motor vehicles in FY 1987.

Habitat Resources

Justification of Program and Performance

Activity: Habitat Resources

(Dollar Amounts in Thousands)

Subactivity		1986 Enacted to Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) from Base
Field Operations:						
Ecological Services	($)	17,858	17,089	17,560	17,840	+280
	(FTE-T)	(437)	(437)	(437)	(437)	(0)
Resource Contaminant	($)	4,141	3,963	4,072	5,025	+953
Assessment	(FTE-T)	(43)	(43)	(43)	(43)	(0)
Environmental	($)	306	293	302	302	0
Coordination	(FTE-T)	(5)	(5)	(5)	(5)	(0)
F.O. Subtotal	($)	22,305	21,345	21,934	23,16	+1,233
	(FTE)	(485)	(485)	(485)	(485)	(0)
National Wetlands Inventory	($)	5,346	5,115	5,313	5,313	0
	(FTE-T)	(41)	(41)	(41)	(41)	(0)
Research and Development						
Research	($)	10,337	9,898	10,237	10,957	+720
	(FTE-T)	(194)	(194)	(194)	(194)	(0)
Biological	($)	5,130	4,904	5,071	5,071	0
Services	(FTE-T)	(111)	(111)	(111)	(111)	(0)
R&D Subtotal	($)	15,467	14,802	15,308	16,028	+720
	(FTE-T)	(305)	(305)	(305)	(305)	(0)
Cooperative Units	($)	4,665	4,465	4,564	4,564	0
	(FTE-T)	(80)	(80)	(80)	(80)	(0)
TOTAL REQUIREMENTS	($)	47,783	45,727	47,119	49,072	+1,953
	(FTE)	(911)	(911)	(911)	(911)	(0)

Authorization: 16 U.S.C. 742(a)-754; (Fish and Wildlife Act of 1956). Requires the development and distribution of fish and wildlife information and to 1) ". . . take such steps as may be required for the development, advancement, management, conservation, and protection of the fisheries resources;" and 2) ". . . for . . . wildlife resources through research . . . and other means."

16 U.S.C. 661-666(c); (Fish and Wildlife Coordination Act). Requires the Fish and Wildlife Service (FWS) to investigate and report on all proposed Federal actions that may affect any stream or other body of water and to provide recommendations to minimize project related impacts on fish and wildlife resources including water pollution impacts on fish and wildlife. In addition, the Fish and Wildlife Service may conduct such investigations as may be necessary and provide appropriate recommendations and reports on the fish and wildlife impacts of pollution.

Activity Summary: The FY 1987 Budget Request of $49,072,000 provides for continuation of the following efforts:

- Predevelopment consultation
- Project Investigations
- Permit and License Review
- Resource Contaminant Assessment
- Environmental Coordination
- Wetland Inventory
- Research and Development
- Cooperative Units

Justification of Program and Performance

Activity: Habitat Resources
Subactivity: Field Operations

(Dollar Amounts in Thousands)

Program Element		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc(+) Dec(-) from Base
Ecological Services						
Pre-Development Consultation	($)	9,108	8,777	9,018	9,298	+280
	(FTE-T)	(178)	(178)	(178)	(178)	(0)
Project Investigations	($)	2,679	2,542	2,612	2,612	0
	(FTE-T)	(75)	(75)	(75)	(75)	(0)
Permits and Licenses	($)	6,071	5,770	5,930	5,930	0
	(FTE-T)	(184)	(184)	(184)	(184)	(0)
Subtotal	($)	17,858	17,089	17,560	17,840	+280
	(FTE-T)	(437)	(437)	(437)	(437)	(0)
Resource Contaminant Assessment	($)	4,141	3,963	4,072	5,025	+953
	(FTE-T)	(43)	(43)	(43)	(43)	(0)
Environmental Coordination	($)	306	293	302	302	0
	(FTE-T)	(5)	(5)	(5)	(5)	(0)
Total Requirements	($)	22,305	21,345	21,934	23,167	+1,233
	(FTE-T)	(485)	(485)	(485)	(485)	(0)

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L.99-177 Reduction	1986 Adjusted Approp.
Field Operations	22,305	-960	21,345

The $960,000 reduction necessitated by P.L. 99-177 will cause the following reductions in Field Operations, in priority order (first to be deferred):

1) Training activities designed to make field personnel aware of new/evolving impact assessment techniques, contaminant evaluation and wetland delineation;

2) Purchase of equipment such as computers, software, word processors and field/safety equipment for contaminant monitoring activities;

3) Travel designed to allow on-site permit and license evaluations will be curtailed in favor of "desk-top" evaluations.

4) Temporary employees will be placed in non-pay status or terminated.

Authorization: 16 U.S.C. 742(a)-754; (Fish and Wildlife Act of 1956). Requires the development and distribution of fish and wildlife information and ". . . take such steps as may be required for the development, advancement, management, conservation, and protection of the fisheries resources;"

16 U.S.C. 661-666(c); (Fish and Wildlife Coordination Act). Requires the Fish and Wildlife Service to investigate and report on all proposed Federal actions that may affect any stream or other body of water and to provide recommendations to minimize project related impacts on fish and wildlife and to conduct such investigations as may be necessary and provide appropriate recommendations and reports on the fish and wildlife impacts of pollution.

The other statutes listed below are generally under the umbrella of the above Acts and require other Federal agencies to consider the Fish and Wildlife Service's recommendations prior to making a final regulatory or construction decision. These statutes account for the Service's primary workload under various projects, permit or license investigations, contaminant assessments, and environmental coordination.

o 16 U.S.C. 791a et seq.; (Federal Power Act, as amended). Requires that licenses issued for hydro-electric projects include recreational features such as fishing, maintenance and operation of fishways, and terms and conditions on license exemptions for conduit facilities and small-scale hydro-projects.

o Public Law 97-348, October 18, 1982; (Coastal Barrier Resources Act). Section 6 requires Federal agencies to consult with the Secretary of the Interior prior to making authorized Federal expenditures or financial assistance available within the Coastal Barrier Resources System.

o 16 U.S.C. 1001-1009; (Watershed Protection and Flood Prevention Act, as amended). Section 1008 requires a report of findings and recommendations for the conservation and development of wildlife resources.

o 16 U.S.C. 1221-1226; (Estuary Protection Act). Section 1224 requires that all Federal agencies, planning for the use or development of water, shall give consideration to estuaries and their natural resources. All project plans and reports submitted to Congress which affect estuaries shall contain a discussion by the Secretary of the Interior of the effects of such projects on the estuarine resources and his recommendations.

o 33 U.S.C. 401 and 403; (River and Harbor Act of 1899). Section 10 prohibits the unauthorized obstruction or the alteration, of navigable waters by fills or construction of outfalls, piers, levees, etc. The Corps of Engineers (COE) has the authority to issue permits for such activities.

- 42 U.S.C. 4321 et.seq.; (National Environmental Policy Act of 1969, as amended). Requires all Federal agencies to consult with each other and to employ systematic, interdisciplinary techniques in planning and decisionmaking on any Federal action significantly affecting the quality of the human environment.

- 30 U.S.C. 1201 et. seq.; (Surface Mining Control and Reclamation Act of 1977). Requires the Secretary to regulate surface mining and reclamation at existing and future mining areas. The Fish and Wildlife Service provides technical assistance for fish and wildlife aspects on the Department's programs on active and abandoned mine lands.

- 16 U.S.C. 2602-2645; (Public Utilities Regulatory Policies Act of 1978); and 16 U.S.C. 792-828(c); (Energy Security Act of 1980). Direct that "any exemption from licensing granted . . . for a small hydroelectric power project must comply with any terms and conditions that any Federal or State fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish and wildlife resources . . .".

- 33 U.S.C. 1215 et. seq.; (Federal Water Pollution Control Act Amendments of 1972, as amended by the Clean Water Act of 1977). Creates a Federal permit and license system for the discharge of materials into navigable waters. Section 404 provides for the Corps of Engineers regulatory program covering the discharge of dredged or fill materials and for the input of fish and wildlife concerns. The 1977 amendments substantially increased the Service's consultation responsibilities under the Act.

- Public Law 99-198, December 23, 1985; (Food Security Act of 1985 - Farm Bill). This law provides for Fish and Wildlife Service participation in the implementation of key conservation provisions including: Farm Debt Restructure and Conservation Set-Aside, Conservation Reserve and Wetland Conservation (Swampbuster).

Ecological Services

PRE-DEVELOPMENT CONSULTATION: FY 1987: $9,018,000/178 FTEs

Objectives:

1. To ensure that baseline fish and wildlife information is available in advance of development of site-specific project plans.

2. To provide balanced development of the Nation's natural resources with reliance on objective scientific information through identification of environmentally non-sensitive and sensitive areas to aid developers in siting and designing projects to minimize public fish and wildlife resource losses.

3. To provide fish and wildlife information, reports, and recommendations to the Department's Federal Coal Management Program, OCS Program, and other energy and strategic minerals development programs.

4. To improve State and Federal relationships in fish and wildlife conservation by ensuring that areawide development plans consider fish and wildlife resources of National importance.

5. To work with the Department of Agriculture in implementing provisions of the 1985 Farm Bill, especially seek fish and wildlife resource opportunities in the Swampbuster, Conservation Reserve, Farm Debt Restructure and other provisions.

Base Program: Pre-Development Consultation (PDC) activities provide expert ecological consultation and advice to other Federal agencies, States, industry and the public prior to initiation of formal project planning or submission of permit and license applications, i.e., at a stage before Service input is required under the Fish and Wildlife Coordination Act. This advice is developed through use of baseline information and through review of alternatives, opportunities, problems, and needs of fish and wildlife over large geographic areas. Baseline information is developed in important resource areas, and resource category determinations are made in areas of likely development in an effort to facilitate balanced development. Particular emphasis is placed upon providing technical assistance to those corporate interests, public and private entities, and State and local governmental agencies where an interest in addressing fish and wildlife issues of concern to the Service is present or could arise. Geographic areas of major effort include:

- Chesapeake Bay
- Great Lakes
- Lower Mississippi River Valley and Louisiana Coastal Wetlands
- Upper Mississippi River
- Prairie Pothole Region
- San Francisco Bay and tributaries
- Texas Gulf Coast
- Pacific Northwest Rivers and Estuaries
- North Slope of Alaska

PDC is also the Service's primary delivery mechanism for providing fish and wildlife information, conducting investigations, and providing analysis and recommendations for energy development on Federal lands so that fish and wildlife needs are considered during this process. The Service supplies industry, Federal, and State agencies with the fish and wildlife information and analyses necessary for use in planning and administering development activities. PDC is also a primary vehicle for implementing pertinent sections of the 1985 Farm Bill (Farm Debt Restructure, Conservation Reserve and Swampbuster provisions).

Habitat Resources has continued increased levels of PDC effort in general, as well as to specifically conduct Chesapeake Bay activities. Chesapeake Bay activities initiated in FY 1985 and carried through in FY 1986 include the designation of a full time coordinator to facilitate information transfer, field contaminant and habitat trend assessments, and technical assistance to agencies such as the Soil Conservation Service and to State and local governmental planning entities. Efforts in additional watersheds have included Susquehanna, Choptank and Chester River Watersheds and new efforts have begun in the James River Watershed. The Metropolitan River Study initiated in FY 1985 was concluded in FY 1986. The Des Plaines Wetland Project in FY 1986 has been funded by State and private contributions. In FY 1987 funds previously designated for Des Plaines will be used in higher priority areas such as the lower Mississippi River Valley and Prairie Potholes where existing wetland habitats can be protected.

PRE-DEVELOPMENT CONSULTATION WORKLOAD TABLE

	FY 1985 Actual	Estimated FY 1986	Estimated FY 1987
Number of consultation efforts in support of Permits and Licenses, Wetlands determinations and Exemption requests (Farm Bill)	4,570	5,000	5,000
Number of consultation efforts in support of Project Investigations	650	650	800
Baseline Evaluations and Resource Category Determinations	190	190	190
Transmission Corridor Investigations and Transportation Project Investigations	505	505	505
Forest Service and BLM Grazing/Range and Other Land Management Planning	60	60	85
Estuarine/Marine Sanctuary Listing Studies	10	10	10
Section 201 & 303 Clean Water Act Actions	100	100	110
Technical Assistance/Inventories (including BLM and USDA)	1,885,000	2,100,000	2,100,000
Coal and Mineral Leasing activities	625	595	595
OCS Leasing Activities	3,135	2,575	2,575
Coastal Zone Management Program Reviews	2	2	2
Coastal Barriers Resources Act, Section 6 Exemption Consultations	75	75	75

Increase for FY 1987	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-)
Pre-Development Consultation $	9,018	9,298	+280
(FTE)	(178)	(178)	(0)

PRE-DEVELOPMENT CONSULTATION: +$280,000/0 FTEs

Funds will be used in FY 1987 to assess effectiveness and efficiency of Service recommendations and initiate follow-up activities. Recommendations are made to protect fish and wildlife resources by reviewing permits and water resource construction projects. The Service will conduct field reviews to evaluate if recommendations were feasible and accomplished what was planned. We will also screen out those recommendations which either did not work or placed an economic burden on the project but yielded no natural resource benefit. Instructional Memoranda and guidance will be modified by our findings. This will improve the Service's ability to make feasible and prudent recommendations to developers prior to formal processes in order to ensure maximum consideration of fish and wildlife in the design phases of development. Additional activities to implement migratory waterfowl habitat/management issues off Service lands will be emphasized.

The Object Class distribution for the $280,000 increase is as follows:

Transportation	$ 40,000
Equipment and Supplies	10,000
ADP	20,000
Other Contracts	60,000
Other Services	150,000
	$280,000

PROJECT INVESTIGATIONS: FY 1987: $2,612,000/75 FTEs

Objectives:

1. To ensure that the ecological impacts of Federal and federally-assisted water resource development projects and their alternatives are evaluated, and that needed fish and wildlife conservation, compensation, mitigation, and enhancement measures are identified, justified and recommended to project sponsors and planners, including use of easements as provided by 1985 Farm Bill.

2. To increase use of standardized, biologically-credible procedures for evaluating project impacts on both terrestrial and aquatic habitats, and for comparing alternative plans developed under the National Environment Policy Act.

3. To improve the management of fish and wildlife resources, based on greater reliance on objective, scientific information.

Activities in Project Investigations for water resource development projects in FY 1987 will be distributed as follows (estimates):

Corps of Engineers	- 58%
U.S. Dept. of Agriculture	- 8
Bureau of Reclamation	- 10
Other	- 24

Base Program: Through Project Investigations, the Service investigates, reports, and makes recommendations on water resource development projects funded or constructed by the Corps of Engineers (COE), the Bureau of Reclamation (BR), the Soil Conservation Service (SCS) and various other agencies.

Using quantitative assessment methodologies, such as the Service's Habitat Evaluation Procedures and Instream Flow Incremental Methodology, Service personnel can accurately evaluate project affects and propose alternatives that anticipate or adequately compensate for project-induced impacts on fish and wildlife resources. When fish and wildlife impacts are presented to project sponsors in the form of quantitative value estimates, these data can be more easily factored into project planners' evaluation and decisionmaking processes to maximize overall project benefits. These methods also provide consistent reviews of projects and their impacts.

PROJECT INVESTIGATIONS WORKLOAD TABLE

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
COE Small Projects	100	100	100
COE Maintenance Dredging	300	300	300
BR Small Reclamation Projects	20	20	20
SCS Small Watershed Projects	95	95	95
SCS Resource Conservation and Development Projects	45	40	40
Other Project Investigations including 1985 Farm Bill provisions (easements)	360	360	360
*COE major Projects	475	475	475
*BR Major Projects	110	110	110

*Nonreimbursable Service activities on major COE and BR projects include NEPA review, funding negotiations, and review of feasibility, survey and project planning reports and participation in construction phase planning.

PERMITS AND LICENSES: FY 1987: $5,930,000/184 FTEs

Objectives:

1. To ensure that Federal permitting and licensing programs for water resource development provide for balanced decisionmaking by taking into account fish and wildlife considerations.

2. To ensure that fish and wildlife information provided to Federal permit and license programs and to the applicants for such permits and licenses is timely and the best available.

3. To ensure that the recommendations for mitigation of fish and wildlife losses are reasonable, defensible, and cost effective.

4. To ensure that the program is selective, responsive, thorough, and consistent in making fish and wildlife recommendations wetland determinations and responding to wetland exemption requests from agencies and the private sector.

Base Program: There are three basic efforts under the permits and licenses program: the Corps of Engineers regulatory program, Federal Energy Regulatory Commission (FERC) permits and licenses, and other permits.

Corps of Engineer Permits: Of the annual permit applications received by the Corps, roughly 82 percent are approved, 2 percent are denied and 16 percent are withdrawn. About 33 percent of all approved permits are significantly modified in the permit process. Permit applications withdrawn, denied and modified amount to roughly 50 percent of all permit applications, thus indicating that an administrative balancing process is at work. Approximately 58% of all COE permit applications are joint processing situations involving both Section 10 of the Rivers and Harbors Act of 1899, and Section 404 of the Federal Water Pollution Control Act Amendments of 1972 - see authorizations.

SECTION 10, 404 and 10/404 WORKLOAD TABLE

	Actual	Estimated	
	FY 1985	FY 1986	FY 1987
Public Notices Received	14,000	11,000 1/	11,500
No Action	4,000	3,000	3,300 2/
No Objection	6,500	4,500	4,700 2/
Modifications Recommended	2,400	2,400	2,400
Denial Requested	750	600	600
No Comment	350	500	500
Projects Covered by Nationwide or Statewide General Permits 3/	5,000	5,500	5,700 3/
Pre-Discharge Notification	-	5,000 4/	5,300 4/

1/ FY-1985 to 1986 reduction in number of permits due to increased pre-development consultation and Nationwide and Statewide general permits.

2/ Increases from FY 86 to FY 87 are due to shifts in workload emphasis anticipated as a result of increase of pre-discharge notification reviews.

3/ The number of Nationwide and Statewide general permits continue to increase.

4/ As a result of a change in the COE regulatory program, project proponents will be required to notify the COE prior to discharge of fill material if the work would affect 1-10 acres of wetlands. The COE notifies the Service and the Service recommends whether an additional permit should be required. Approximately 10% of these notifications will require additional work by Ecological Services personnel. As this program begins to be implemented additional permits will be processed, thus an increase from FY 1986 to FY 1987 is planned. The work will be prioritized according to relative importance to fish and wildlife (numbers provided by Corps of Engineers).

Actions involving section 10/404 permits require approximately 56% of the permits and licenses funds.

Federal Energy Regulatory Commission Permits and Activities: General Service responsibilities relative to Federal Energy Regulatory Commission permits and licenses include analysis and recommendations concerning fish passage; instream flows; water level fluctuations; water quality as it affects fish and wildlife; threatened and endangered species; impacts of new transmission lines on raptors and other migratory birds; protection of wetlands and other significant or unique habitats; public access; the impact of construction activities such as dredging and dewatering; and the mitigation of project impacts. Most FERC work is done at the field office level in response to requests to review license applications and Environmental Impact Statements from the Department's Office of Environmental Project Review. Field Offices also advise and assist developers in preparation of their Exhibit Es (Environmental Reports) which accompany license and exemption applications by developing terms and conditions coordinating with other agencies, preparing mitigation plans, and calculating instream flow requirements.

Two specific Service activities are necessary to insure that fish and wildlife values are considered in FERC licensing procedures: coordination and review of site specific project proposals and evaluation of the cumulative impacts of large numbers of proposed projects within the same watershed or basin.

The overall trend of Service involvement in individual project specific impact assessments is shown in the following table. There has been a significant shift of emphasis from exemption applications to licenses because recent court of appeals ruling reduced the number of projects that can qualify for exemptions. The amount of Service involvement per project in the licenses application phase is significantly more than for the exemption application phase because making recommendations for licenses requires greater field data and evaluation efforts prior to issuance of the license.

FERC PERMITS AND LICENSES WORKLOAD TABLE

	Actual	Estimated	
	FY 1985	FY 1936	FY 1987
Preliminary Permits	525	525	475
Exemption Applications	200	150	75
Licenses	735	700	700
Pre-Application Consultations	835	800	800
Total	2,295	2,175	2,050

The second type of Service action in the FERC licensing process, cumulative impact assessment, is a rapidly expanding challenge. The cumulative effects problem is a major issue. Multiple projects in a basin may have far different impacts upon fish and wildlife resources than can be predicted and addressed based upon isolated case-by-case project analysis. They require considerable coordination and review efforts in order to understand and identify significant adverse cumulative impacts and develop appropriate mitigation to apply on a case-by-case basis. The table below displays workload in this area.

CUMULATIVE IMPACT ASSESSMENT WORKLOAD

	Actual		Estimated	
	FY 1984	FY 1985	FY 1986	FY 1987
Basins with Potential Cumulative Effect Impact Problems	23	32	40	40

Service activities in FERC permits, licenses and exemptions require approximately 28% of the Permits and Licenses funding.

Other permits: This activity involves Service review and comment on permits and licenses regulated by various other agencies. These permits include: Coast Guard Section 9 Permits for construction and operation of bridges and causeways; Nuclear Regulatory Commission permits for construction of nuclear facilities and licenses for operation of such facilities; EPA Section 402 (CWA) point source discharge permits; and Bureau of Land Management right-of-way permits to allow multiple use of public lands.

Service work on "other permits" requires approximately 16% of the Permits and Licenses funding.

Resource Contaminant Assessment

RESOURCE CONTAMINANT ASSESSMENT: FY 1987: $4,072,000/43 FTEs.

The Resource Contaminant Assessment (RCA) program supports all of the Service's operational activities concerned with fish and wildlife resources contamination from pollutants such as petroleum, pesticides, and other toxic materials. The Service's role emphasizes assessments of contaminant impacts and effects on biotic resources (fish and wildlife) whereas the Environmental Protection Agency (EPA) emphasizes water quality and human health aspects.

Resource Contaminant Assessment consists of two major functional projects: 1) Pesticide and Toxic Chemical Monitoring and 2) Contaminant Field Operations.

Objectives:

1. To identify unknown pollutants which may adversely affect fish and wildlife or their habitats.

2. To determine and provide information to Federal and State agencies and private industry on National trends of contaminant residue levels in selected species over time and by geographic location through the analysis of fish and wildlife samples.

3. To provide emergency response actions to spills of oil and hazardous substances which may be adversely affecting fish and wildlife resources, to provide assessments of fish and wildlife resource damages resulting from exposure at hazardous waste sites, and, as necessary, to file claims for damages to those resources.

4. To conduct assessments of fish and wildlife that may be exposed to environmental contamination.

5. To provide guidance to Federal and State agencies, private industry, and urban and rural landowners to correct sources of contaminants that threaten wetlands and other fish and wildlife habitat.

6. To identify and assess the impacts of contaminants on Service owned lands and in coordination with other Service programs develop appropriate response plans.

PESTICIDE AND TOXIC CHEMICAL MONITORING: FY 1987: $1,254,000/7 FTEs.

The Service's monitoring project develops and provides information on the buildup of persistent chemicals and pollutants in the Nation's fish and wildlife populations.

The Service's monitoring project includes participation in the National Contaminant Biomonitoring Program (NCBP) and the Great Lakes International Fish Contaminant Monitoring Program, a joint field operation and research project. The information collected in the monitoring projects aids in the conservation, protection and enhancement of the Nation's fish and wildlife resources and their habitats as follows:

- o Helps with workload prioritization by identifying where in the U.S. contaminants are increasing or decreasing;
- o Used in endangered species (bald eagle, peregrine falcon, e.g.) consultation and recovery planning;
- o Assists in identifying contaminant research needs and directions.

Samples are collected by Resource Contaminant Assessment biologists in the field utilizing standardized techniques and sent to Fish and Wildlife laboratories for analysis. All samples are analyzed for selected organochlorine pesticides (e.g., DDT and dieldrin), and certain industrial compounds (e.g., PCBs) known or suspected to have adverse fish and wildlife resource impacts. Fish samples are also analyzed for seven metals (mercury, lead, cadmiium, arsenic, selenium, zinc, and copper). Selected samples are analyzed each year to detect other unknown compounds of potential environmental concern, i.e., herbicides, industrial chemicals and "new generation" pollutants (chemicals recently developed by industry or existing compounds not previously recognized as hazardous to fish and wildlife and thus not previously surveyed in the environment). Analysis of these complex compounds requires sophisticated analytical equipment and methods for detection, quantification and verification.

Freshwater fish: Water bodies tend to become contaminant sinks and fish being rapid assimilators of ambient contaminants are often the first indicators of environmental stress. Contaminants may be absorbed directly from the water column or injested through feeding upon contaminated prey. Fish samples are collected every two years from major drainages (approximately 110) in the United States. Two samples of bottom-feeding species and one sample of a predator species are collected at each site and analyzed for chemical residue. The two year sampling cycle provides the Service the optimum opportunity to track both National and geographic trends of contaminant buildup in freshwater fish and their habitats.

Starlings and Waterfowl - Starlings were chosen to represent a relatively sedentary (non-migratory) species, common throughout the United States. Waterfowl were chosen to represent a highly migratory species group which is dependent upon a wide array of wetland habitats. Every three years, starlings from 120 statistically predetermined sites are sampled and analyzed, as are waterfowl parts collected from regional Waterfowl Parts Surveys.

The three year frequency of sampling is considered optimium for the starling and waterfowl monitoring effort, since both starlings and waterfowl have a somewhat delayed reaction to contaminant buildup. Their primary contaminant contact results from feeding upon plant and/or animal matter which must first assimilate contaminants during normal life cycle processes. Therefore, the three year sampling frequency will adequately detect trends of contaminant buildup or areas where new contamination is occurring.

The FY 1985 field collections included both duck wings and fish. For fish this began the two-year collection cycle. Fish will again be collected in FY 1987. In FY 1986 starling samples are being collected.

The Service recognized in FY 1985 that the NCBP does not gather information on estuarine species and habitats. It is widely acknowledged that estuaries serve as a sump for land-generated and water-borne contaminants. In FY 1986 the Service will evaluate species and methodologies for monitoring and assessing the consequences of contaminant buildup in estuarine fish and wildlife species and their habitat. In FY 1986, the Service will also evaluate the NCBP to determine if the program is monitoring the correct sets of chemicals to be responsive to present day contaminant problems resulting from new generation chemicals.

The Service continued several activities in response to FY 1985 and 1986 Congressional directives concerning contaminant monitoring. Regional studies of contaminant effects on fish and wildlife are continuing in the San Joaquin Valley and San Francisco Bay Delta, three California NWRs, and the Lower Colorado and Gila Rivers. Technical assistance is being provided to EPA on the Biological Monitoring Program on the Hudson River. The Service is establishing a central laboratory facility at Patuxent Wildlife Research Center to support field contaminant analysis needs. This facility currently provides rapid turn around analysis of highest priority contaminant samples and provides quality control for contract analysis. The entire lab will be fully operational by the second quarter of FY 1986.

CONTAMINANT FIELD OPERATIONS PROJECT: FY 1987: $2,818,000/36 FTEs

Under the Contaminant Field Operations Project, field level contaminant specialists provide emergency response actions in the case of major spills, collect samples, conduct field assessments, and provide technical expertise and assistance Servicewide on matters of fish and wildlife contamination.

CONTAMINANT FIELD OPERATIONS PROJECT WORKLOAD TABLE 1/

	Actual	Estimated	
	1985	1986	1987
Fish and Wildlife Monitoring Sites Analyzed for Contaminants	180	180	180
Proposals for Pesticide Use	1,700	1,800	1,800
Pollution Incident Responses	900	900	800 2/
Field Assessments	100	180	200 3/
Technical Assistance	2,600	2,550	2,800 4/
Preliminary Natural Resource Surveys	60	240	250 5/

1/ Operational entities rely heavily upon research for the analysis, interpretation and publishing of data associated with many of the workload items.

2/ The number of spills have been decreasing; it is anticipated they will continue to decrease.

3/ Analysis for new contaminants, and Site Specific Analyses were combined as sub-elements under Field Assessments. Field Assessments have been broadly redefined as: surveys of fish and wildlife under stress or suspected stress. These could be conducted on or off Service lands. Field assessments will increase because of the increased emphasis on Service lands.

4/ Technical assistance will increase due to increased emphasis of contaminant clean-up of Service lands.

5/ These surveys will include additional surveys requested by the Department.

In 1985 increased emphasis was placed on assessment of contaminant problems on Service lands. This effort will entail continuing a coordinated effort between Habitat Resources and Wildlife Resources.

Habitat Resources and Wildlife Resources will further evaluate National Wildlife Refuges in 1986 for additional contaminant sites. FY 1987 activities will be directed toward clean-up of identified sites.

Efforts to assess selenium contamination at Kesterson NWR and adjacent off-Service lands will continue in 1986 and 1987. The investigation to determine the extent of chemical contamination problems at Crab Orchard NWR contaminant sites, begun in FY 1985 in response to a Congressional directive, will be completed in FY 1986. A follow-up study to make specific recommendations for cleanup will be initiated in FY 1986 and will be completed in FY 1987. Contaminant evaluation efforts that were initiated in the San Francisco Bay in response to an FY 1986 Congressional directive will continue in FY 1987.

Off Service lands, Habitat Resources in cooperation with other Service programs is working in areas throughout the country to assess potential contaminant impacts on fish and wildlife resources. These areas include:

- o Atlantic and Gulf coastal areas of the U.S. (agricultural/industrial contaminants)
- o Great Lakes (industrial contaminants)
- o Upper Mid-West/Prairie Potholes (agricultural contaminants)
- o California-Central Valley, San Francisco Bay (agricultural/industrial contaminants)
- o Southeastern Coastal Plains, including Bottomland Hardwoods (agricultural contaminants)
- o Rio Grande/Pecos Rivers (agricultural contaminants)
- o Puget Sound (industrial contaminants)

Special studies were initiated in FY 1985 in some of these areas to assess the extent of problems and to recommend options for solution. Additional studies will be initiated in FY 1986 and FY 1987. These studies are:

FY 1985

- o Impacts of agricultural contaminants, especially heavy metals and soil trace elements on waterfowl and anadromous fish off the San Joaquin and Sacramento Rivers, California.
- o Extent of residual DDT contamination in resident fish and migratory bird habitats of Gila and Lower Colorado Rivers, Arizona.
- o Evaluation of possible contaminants at three California refuges: Seal Beach NWR, Tijuana Slough and Salton Sea NWR.

FY 1986

- o Impacts of oil and gas production contaminants on Arctic nesting geese populations (Alaska, Oregon, Washington, and California) and Beaufort Sea estuaries (Alaska).
- o Effects of contaminants on Great Lakes migratory birds utilizing Green Bay, Wisconsin and Saginaw Bay, Michigan.
- o Correlation of morphological abnormalities in fish and shellfish, and contaminants in the Great Lakes and its tributaries.

FY 1987

- o Special studies for FY 1987 will be identified based on the results of monitoring and investigations conducted in FY 1986. However, these studies will probably be located in areas of highest geographic concern.

The Service is developing a training program for Resource Contaminant Specialists and other Service personnel. In FY 85, a field training handbook was developed. In FY 86, two courses will be administered by the Service's Leetown Fisheries Academy, to provide entry level RCA Specialists and ES Field Supervisors with a working knowledge of the responsibilities, mandates, opportunities, and techniques associated with RCA field operations. More intensive training in state-of-the art field methods as well as a broader knowledge of basic contaminants chemistry and toxicology will also be offered.

In FY 87, three courses will be offered through the Academy, including a second presentation of the introductory course. In addition, the second course will be subdivided, with augmented training offered in both field methods and the chemistry, toxicology and analytical methods associated with resource contaminants.

Increase for FY 1987

		FY 1987 Base	FY 1987 Estimate	Increase/ Decrease
Resource Contaminant	($000)	4,072	5,025	+953
Assessment	(FTEs)	(43)	(43)	(0)

SITE SPECIFIC IDENTIFICATION AND EVALUATION OF CONTAMINANT IMPACTS ON FISH AND WILDLIFE HABITAT RESOURCES: +$696,000/0 FTEs

This initiative would address the most critical contaminant problems (Hot Spots) that have been identified by Service Regions through previous contaminant monitoring efforts. This funding will allow initiation of site specific efforts to address contaminants affecting important fish and wildlife habitats, both on and off Service lands, in a number of major geographic problem areas throughout the Nation. Special emphasis would be given to waterfowl wintering and nesting habitats, anadromous fish and estuarine fish and shellfish habitats, as well as priority wetland habitats.

Funding levels in FY 1987 will allow for the following study efforts to be initiated.

- o Detailed analysis of agricultural contaminant problems, primarily soil trace elements concentrated in irrigation drain water and associated with the Central Valley Project and the Sacramento San Joaquin River System and San Francisco Bay would be initiated.
- o Assessment of petroleum and petro-chemical discharges and agricultural run-off into the Texas Gulf Coast would be targeted to areas identified in earlier studies.
- o Impacts to waterfowl from agricultural and industrial contaminants on the Upper Mississippi River, including the Upper Mississippi NWR, will be assessed.
- o The Great Lakes monitoring of canvasback ducks, scaup, and lake trout and supporting food chain species would be increased to identify potential industrial contaminant impacts and management actions.
- o Comprehensive surveys for suspected industrial and agricultural contaminants would be undertaken for important waterfowl and anadromous fish habitats of the Apalachicola River Basin, the Pocosins of North Carolina and other major South Atlantic watersheds.
- o Efforts to protect Alaska tundra waterfowl habitats from petrochemical contaminant impacts through early identification of sensitive sites would be increased.

The object class distribution for the $696,000 increase is as follows:

Contract Services	$300,000
Transportation of Things	96,000
Other Services	300,000
	$696,000

EVALUATION OF INDUSTRIAL AND AGRICULTURAL CONTAMINANTS: +$257,000/0 FTEs

The decline of the Nation's fish and wildlife resources can be linked directly to habitat loss. As wetlands and other important fish and wildlife areas disappear, remaining high quality habitat is at a premium. However, the quality of remaining habitats is being reduced. Point source discharges (such as those from industrial plants and sewage treatment facilities) and runoff resulting from agricultural and other land management practices are affecting the productivity of remaining habitats by introducing sediments and other contaminants into important breeding, spawning and feeding areas.

The Service provides information on fish and wildlife needs to Federal and State land management, advisory and regulatory agencies. For instance, input is provided to EPA under Section 208 (area-wide planning, and Section 402 (National Pollution Discharge Elimination System) of the Clean Water Act. The Service cooperates with State and Federal agencies such as Environmental Protection Agency, Department of Agriculture, and U. S. Geological Survey in developing best management practices to better control contaminant discharges. Service assistance is also sought in development and review of State water quality standards, which establish allowable levels of contaminants in public waters, to ensure that such standards adequately protect fish and wildlife habitats from contaminant impacts.

During FY 1987 the Service will develop additional data concerning location, transport and fate of contaminants. This data is necessary to enable the Service to provide more effective assistance to Federal and State agencies.

The increased funding in FY 1987 will allow field level reconnaissance studies to scope specific problems concerning pollution including point source contaminant discharges, evaluation and revision of discharge permit criteria, effects of habitat degradation, bio-accumulation of specific contaminants, and assistance and management guidance to landowners.

The object class distribution for the $257,000 increase is as follows:

Contract Services	$ 40,000
Transportation of Things	30,000
Travel	20,000
Other Services	167,000
	$ 257,000

Environmental Coordination

Objectives:

1. To oversee Service compliance with the National Environmental Policy Act (NEPA).

2. To coordinate and/or collate Service comments on NEPA documents prepared by other Federal agencies to promote adequate consideration of fish and wildlife resources.

3. To coordinate Service input to the NEPA scoping activities of other Federal agencies when Species of Special Emphasis and/or priority species in Regional Resource Plans may suffer cumulative and/or significant adverse impacts.

4. To assure that all Service interests and jurisdictional responsibilities are integrated into a single response to other agencies and private entities when NEPA documents are prepared or reviewed by the Service.

Base Program: FY 1987: $302,000/5 FTEs

Service reviews of environmental documents and impact statements of other Federal agencies receive the necessary quality control and coordination prior to consolidation into Departmental comments. Technical assistance is provided to all Service elements in preparation and review of NEPA documents. The benefit of Environmental Coordination is timely coordination of Service activities pertaining to NEPA compliance. The following table presents the workload trend.

Workload Factors	Actual FY 1985	Estimated FY 1986	 FY 1987
Document Review			
Internal	725	750	750
Other Agencies	2,475	2,475	2,475
Scoping Assistance	350	400	400

Justification of Program and Performance

Activity: Habitat Resources
Subactivity: National Wetlands Inventory

(Dollar Amounts in Thousands)

Program Element		1986 Enacted To Date	1986 Adjusted Approve	1987 Base	1987 Estimate	Inc.(+) Dec.(-) from Base
National Wetlands Inventory	($)	$5,346	5,115	5,313	5,313	0
	(FTE-T)	(41)	(41)	(41)	(41)	(0)
Total Requirements	($)	5,346	5,115	5,313	5,313	0
	(FTE-T)	(41)	(41)	(41)	(41)	(0)

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
National Wetlands Inventory	5,346	-231	5,115

As a result of the $231,000 reduction necessitated by P.L. 99-177 the National Wetlands Inventory will cut contract task orders for 304 wetland quadrangle maps. To absorb this cut, mapping efforts for priority areas will be reduced by approximately 10%. Top priority areas as identified in 1977 are the coastal zone, including the Great Lakes, the prairie wetlands, playas of the high plains, and the floodplains of major rivers.

Authorization: 33 U.S.C. Sec. 1288; (Clean Water Act of 1977). Requires the Secretary of the Interior ". . . to complete the National Wetlands Inventory of the United States . . . and to provide information . . .to States."

16 U.S.C. 742(a)-754; (Fish and Wildlife Act of 1956). Act requires "conduct . . . investigations, prepare and disseminate information, . . . availability and abundance and the biological requirements of the fish and wildlife resources . . ."

16 U.S.C. 661-667(e); (Fish and Wildlife Coordination Act). Requires "assistance to, and cooperate with . . . the development, protection . . . of all species of wildlife, resources thereof, and their habitat" and "to make surveys and investigations of the wildlife . . ., including lands and waters . . ."

National Wetlands Inventory

Objectives:

1) To conduct the National Wetlands Inventory;
2) To conduct a trends and analysis for wetland changes;
3) To maintain standardized procedures for use in classification and inventory of fish and wildlife wetland habitats;
4) To correlate known values of wetlands to the Service's classification system; and
5) To make this information available to all levels of Government and the private sector for use in planning.
6) To investigate the existing capabilities for updating the wetland maps.
7) To evaluate uses of all National Wetlands Inventory Products and ensure they continue to meet user needs.
8) To provide technical services (map products, soils lists, plants list) to other agencies and in support of Field Operation activities on certain provisions of the Food Security Act of 1985 (Farm Bill).

Base Program: The inventory began its operational phase in FY 1977. It involves preparation of a wetland data base in map form on the characteristics and extent of the Nation's wetlands and deepwater habitats. Wetland maps are being completed for priority areas, and periodic reports on the status and trends of the Nation's wetlands are prepared using statistical sampling procedures. The top priority areas identified in FY 1977 were the coastal zone, including that of the Great Lakes, the prairie wetlands, playas and the floodplains of major rivers, comprising approximately 55% of the conterminous United States and 16% of Alaska. Eight Federal agencies and thirteen States are currently participating in NWI cost sharing activities. Once these priority areas were identified, the practical considerations of availability of photography, cost-sharing by another Federal agency or State, and whether wetland maps could be completed in time to assist with ongoing projects were used to schedule the mapping sequence of priority areas. The cost sharing funds also help to cover the cost of additional training and dissemination to map users.

The following table shows workload factors are indicated:

NATIONAL WETLANDS INVENTORY WORKLOAD FACTORS

Workload Factor	FY 1985 Actual	Estimated FY 1986	Estimated FY 1987
Percentage of conterminous U.S. mapped (cumulative)	40%	45.5%	51%
Percentage of Alaska mapped (cumulative)	10	12	14
Personnel (Federal, State, local agencies) trained in use of inventory products	500	500	500
Number of wetlands maps distributed 1/	51,000	51,000	51,000
Number of States for which wetlands mapping is active	39	38	37
Number of States for which wetlands mapping is complete (cumulative)	9	10	11

1/ Excludes the secondary distribution through State-run centers.

The first statistically sound wetland status and trends analysis in the United States was completed by the Service in FY 1982 and was used to produce the following publications:

- A scientific report, published in April 1983 (Frayer et al, "Status and Trends of Wetlands and Deepwater Habitats in the Conterminous United States, 1950s to 1970s").
- A popular report designed to inform the general public on the current extent of United States wetlands gains and losses, published in March 1984 (R. Tiner "Wetlands of the United States: Current Status and Recent Trends").
- A brochure, entitled "America's Endangered Wetlands", produced in August 1984.

The wetland data provided in these publications are used by Congress, Federal, State, and local governments to assess programs and policies that affect wetlands. The updating of the wetland gains and losses trend analysis will begin in FY 1989 with a report to be completed in 1990. They also focus wetland management on those issues most essential to maintaining our Nation's natural resources. In addition this information provides a base for comparison for future activities in the area of statistical analysis of wetland values.

Many Federal and State agencies, as well as parts of the private sector, have expressed a need for precise estimates of wetland acreages in Alaska, especially for certain wetland categories. Although total wetland acreage in Alaska may be greater than 200 million acres, some wetland categories that serve as critical habitat for important fish and wildlife resources are not extensive. Coastal areas are a focal point for increasing developmental pressures confronting Alaska. Resource managers need wetland data in order to make ecologically sound decisions. Wetlands in Alaska indirectly provide jobs for people employed in fishing, hunting and recreational industries. Wetlands also provide the habitat for many species used for subsistence purposes by many Alaskans.

Having accurate wetland acreage information in Alaska will reduce conflicts by permitting more efficient planning and resource allocation and increase the effectiveness of interactions between all levels of government and the private sector. A pilot study of wetland status and trends in Alaska consisting of an analysis of 500 plots is underway and will be completed in FY 1987. The results of this initial effort will help determine how many additional study plots will be needed and thus assist in determining the cost of a more comprehensive status and trends analysis.

The wetland classification system, and hence wetland mapping, is hierarchical. The same hierarchical concepts have been structured into the design, computer programs and data compilation procedures for the statistical survey of wetland acreage. The goal of the National survey was to produce useful National numbers, but the sampling design, computer programs and data compilation procedures were developed to also generate acreage estimates by migratory bird flyway, State and subdivision within a State.

The formulae have been developed to answer the question of how many (more) sample plots would be needed to develop wetland acreages for selected geographic areas, such as groups of States, flyways, individual States or even subdivisions of States. Total acreage of wetlands by selected categories can be estimated. The Service is in a position to work within geographic areas such as States or groups of States to provide them with sample-size determinations that will allow the generation of statistically sound wetland acreage data on a user pays basis.

The Wetland Value Database is being developed to correlate known values of wetlands to the Service's classification system and the wetland codes that appear on the maps. The database will help accurately assess State wetland values, aid in developing priorities for wetland protection, and assist in identifying the significance of wetland acreage losses from a value perspective at a local or State and National level. Currently, the database contains approximately 4,000 articles. The database is scheduled for completion in FY 1987 with a total of 7,000 articles.

The purchase and installation of its computers in the 4th quarter of FY 1985 will allow the Service to automate many of the steps in the current wetland map production process to increase efficiency and produce digital as well as, paper maps. The computers will allow NWI to investigate the existing capabilities for updating the wetland maps.

Justification of Program and Performance

Activity: Habitat Resources
Subactivity: Research and Development

(Dollar Amounts in Thousands)

Program Element		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) from Base
Research	($)	10,337	9,898	10,237	10,957	+720
	(FTE-T)	(194)	(194)	(194)	(194)	(0)
Biological Services	($)	5,130	4,904	5,071	5,071	0
	(FTE-T)	(111)	(111)	(111)	(111)	(0)
Total Requirements	($)	15,467	14,802	15,308	16,028	+720
	(FTE-T)	(305)	(305)	(305)	(305)	(0)

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Research and Development	15,467	-665	14,802

As a result of the $665,000 P.L. 99-177 reductions lower priority tasks at the Research and Development laboratories and teams will be reduced or terminated. An immediate effect of the reduction will include release of up to 10 temporary employees, five vacancies (permanent full-time employees will not be filled), and participation in the cooperative student program will be reduced. Research and Development support for habitat assessment techniques such as Habitat Evaluation Procedures and Instream Flow Incremental Methologies will be cancelled or significantly reduced. For instance, work on two habitat suitability models and community profiles will be deferred.

Authorization: 16 U.S.C. 742(a)-754; (Fish and Wildlife Act of 1956). Directs the Secretary of the Interior to provide continuing research, extension, and information services, and to take any necessary steps to develop, manage, protect, and conserve fishery and wildlife resources including research.

16 U.S.C. 661-666(c); (Fish and Wildlife Coordination Act). Directs the Fish and Wildlife Service to investigate and report on proposed Federal actions that affect any stream or other body of water and to provide recommendations to minimize impacts on fish and wildlife resources including water pollution impacts. In addition, the Fish and Wildlife Service may conduct such investigations as may be necessary and provide appropriate recommendations and reports on the fish and wildlife impacts of pollution.

7 U.S.C. 136-136(y); (Federal Environment Pesticide Control Act of 1972). Requires the Fish and Wildlife Service to provide data on monitoring and control programs for pesticides.

30 U.S.C. 1201 et. seq.; (Surface Mining Control and Reclamation Act of (1977)). Requires the Secretary of the Interior to regulate surface mining and reclamation at existing and future mining areas. The Fish and Wildlife Service provides technical assistance for fish and wildlife aspects of the Department's programs on active and abandoned mine lands.

16 U.S.C. 2602-2645; (Public Utility Regulatory Policies Act of 1978); and 16 U.S.C. 792-828(c); (Energy Security Act of 1980). Direct that "any exemption from licensing granted . . . for a small hydroelectric power project must comply with any terms and conditions that any Federal or State fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish and wildlife resources. . .."

42 U.S.C. 4321 et. seq.; (National Environmental Policy Act of 1969, as amended). The Service's data and methodologies are used by Federal agencies to early identify fish and wildlife issues in their scoping processes, to develop less damaging project/management alternatives, and to identify means of mitigating unavoidable losses.

RESEARCH: FY 1987: $10,237,000/194 FTEs

Objectives:

1) To conduct research studies to identify and provide scientific information on fish and wildlife populations and ecosystems of high Federal interest and concern that are adversely affected by contaminants.

2) To evaluate the impacts of environmental contaminants on living resources.

3) To recommend corrective measures and/or management alternatives to reduce the exposure of fish and wildlife to environmental contaminants.

4) To support the operational contaminant assessment program through technical assistance and analysis of contaminant samples.

Base Program: The Service's contaminant research efforts focus on fish and wildlife resources of high National interest or concern. The wildlife research efforts conducted at the Patuxent Wildlife Research Center, Laurel, MD, are supported by three field research stations at Corvallis, OR; Victoria, TX; and Davis, CA so located to include selected representative ecosystems to investigate resource problems which cannot be duplicated under experimental laboratory conditions.

The Columbia National Fisheries Laboratory, Columbia, MO, and the Great Lakes Fishery Laboratory, Ann Arbor, MI, conduct research on fish and other freshwater organisms. The Columbia Laboratory is supported by three subsidiary research laboratories at Yankton, SD; Jackson, WY; and Denver, CO. Each facility is situated to conduct research on issues and resources that have a regional orientation and which cannot be appropriately addressed at Columbia (e.g., interagency investigations of herbicides used in western irrigation systems; forest and agricultural practices; and energy development impacts on northern plains and western mountain species). In addition, field stations supporting contaminant research at Columbia are located at Orono, ME; Athens, GA; Columbus, OH; LaCrosse, WI; Victoria, TX; and Davis, CA.

The Service's research is directed towards addressing resource issues and information needs for effective fish and wildlife management and includes:

o Monitoring and Surveys for Contaminants	$1,000,000
o Acid Rain Impacts	1,422,000
o Impact of Agricultural, Industrial, and Energy Development	2,900,000
o Impacts of Pollutants Associated with Land and River Use	415,000
o Contaminant Impacts on Wetlands and Coastal Areas	1,000,000
o Special Investigations and Contaminant Analysis	1,300,000
o Great Lakes Studies	1,600,000
o Bioindicators of Contaminant Stress	600,000
Total	$10,237,000

FY 1985 Accomplishments

In FY 1985 special emphasis was placed upon development of data to assist in the formulation of strategies to address problems in geographic areas where contaminant impacts are of concern to the Service due to its responsibility to protect migratory birds, anadromous fish and other nationally important species.

Areas of particular concern include the Great Lakes, coastal and estuarine areas and the Central Valley of California. Other areas of emphasis include the Northeast, Southwest and Midwest, (see figure 1).

Highlights of the FY 1985 program include the following:

- Investigation of "new generation" chemicals. Each year thousands of new chemicals are being produced either directly or as by-products of energy or industrial processes. Examples include polynuclear aromatic hydrocarbons (PAHs) produced as a result of energy and heavy industry related activities such as oil, gas, petrochemical, and steel production; alkyl halides, such as polychlorinated biphenols produced from heavy industry; and new generation herbicides produced in relation to agricultural practices such as no-till farming.

  In most instances the impacts of these substances upon fish and wildlife are unknown, although deleterious impacts may be suspected. In FY 1985 the Service continued a major effort to develop data concerning the environmental occurrence of these chemicals and to assess their impacts. Studies conducted in the Great Lakes were directed at screening for and evaluating the impacts of these substances on fish. The presence of tumors in Great Lakes fish continued to be studied to determine the extent of carcinogenic contamination from industrial and energy-related processes. Concerns about impacts on species higher up on the food chain led to initiation of a study on productivity and contaminant burdens on fish-eating birds.

  A series of studies directed at assessing impacts of pesticides and other agricultural chemicals on wetlands in the Chesapeake Bay and Prairie Pothole region was completed. Information developed from these studies will be used by Service personnel as they provide technical assistance to Federal, State and local entities who regulate the use of these substances and address water quality issues.

Other studies were initiated in Alaska and the Pacific Northwest to determine impacts of industrial activities, such as placer mining and oil and gas development on anadromous fish and waterfowl.

- Contaminant analysis - A major portion of the FY 1985 R&D effort focused on analysis of contaminant samples, both those collected by R&D personnel in the course of their research studies, and those collected by operational personnel under the National Contaminant Biomonitoring Program (NCBP) and other field contaminant assessment work. As specific contaminant issues have come to the forefront of public attention the need has increased dramatically for contaminant field studies and subsequently for timely and accurate analysis of contaminant samples. In order to accommodate this need, a facility was established at Patuxent Wildlife Research Center. The facility will provide quality control for analysis work contracted to commercial laboratories, and will perform in-house analyses needed on a rapid turn around basis for emergency or crisis situations. An integral component of this facility is a data system that will be used to store and analyze the results of these analyses. Development of the system was initiated in FY 1985. It is proposed to expand the system in FY 1987 to include both operational and research analysis data.

- Monitoring Program - R&D involvement in analyzing samples collected by field personnel for the NCBP was a major continuing activity. The frequency of the fish monitoring program was increased from every three years to every two years.

- Acid Rain Research - Several studies directed at determining the biological effects of acid rain were completed. These studies focused primarily on the development of biological indicators of the impacts of acid rain.

The major portion of work in the area of acid rain was in support of the $2.94 million acid precipitation mitigation demonstration program begun in FY 1985. Implementation of demonstration projects will occur through cooperatively funded efforts in five States -- Minnesota, Massachusetts, West Virginia, Tennessee and New York. The Research and Development Program utilized the $980,000 appropriated for internal FWS research for assuring study design adequacy and quality control of technical aspects of demonstration project implementation, and specific studies in suppport of the cooperative agreements. This included establishment of research protocols and development of standards so that data collected from all sites among participating States will be comparable. In addition to the quality control activities, the following efforts, initiated in FY 1985, will extend through FY 1990:

Monitoring the rate and effectiveness of response of a wide variety of geologic formations in terms of buffering capacity and recoverability of buffering capacity to determine best timing of application, and most practical way to apply buffering agents.

Monitoring the buffering effects upon the entire aquatic food chain and not just upon game fish species.

Analysis of the chemical exchange between sediments, the water column and aquatic organisms subsequent to liming with particular emphasis upon tracking heavy metals.

Recording of pretreatment baseline conditions and post treatment results for the aquatic system as a whole.

FY 1986 Activities:

Contaminant studies initiated in FY 1985 will continue. Areas of interest include:

- o Biomonitoring Program - The R&D involvement in the National Contaminant Biomonitoring Program (NCBP) is a major continuing activity. In FY 1986, Research will analyze contaminant residues from starlings collected in FY 1986, and interpret and publish data for duck wings and fish collected in FY 1985. A study will be started to evaluate the potential to expand the NCBP to contaminants in predatory (high-level food chain) species in estuarine and coastal areas. In addition, the entire NCBP will be reviewed.
- o Contaminant operations - Support to RCA field operations will continue to be a major effort. Analysis of contaminant samples collected by operational personnel will continue. A new effort will be undertaken to develop synthesis documents from existing scientific literature on the relationship between contaminant residue concentrations and the biological functioning of fish and wildlife. Making this information more accessible to operational personnel will enhance their ability to assess the impacts of specific contaminants.
- o Impacts of contaminated sediments - While operational personnel often know the projected rate of release of contaminants from sediments, they lack information that would permit estimation of hazards to wildlife. A study will be initiated to assess impacts of contaminants released into or trapped in aquatic environments. This work will be concentrated largely in the Great Lakes.

FY 1987 Proposed Activities

Contaminant research efforts will continue to focus upon the study topics previously listed with particular emphasis upon development of information to address contaminant threats to National Wildlife Refuges, fish tumor and Great Lakes issues, coastal and estuarine problems, and the acid preciptiation situation. Involvement in a series of special studies in support of field operations efforts will occur. The analytical support effort in response to field operations assessments, the special contaminant studies activity, and the monitoring program will be extensive. Support of the acid precipitation mitigation demonstration program will continue in FY 1987 but at a reduced rate.

Specific areas of focus will include:

- Bioindicators - The development of bioindicators could be an important tool to field personnel in assessing impacts of contaminants on fish and wildlife. Bioindicators range from the obvious (tumors and curved spines in fish, cross-beaks in birds) to the less apparent (disruption in enzyme or metabolic activity). If a correlation can be shown between the biological condition and the presence of a certain contaminant, field personnel can use these techniques to quickly and inexpensively ascertain the degree of threat posed by a contaminant at a particular site. Studies undertaken to evaluate the use of several bioindicators will be continued in FY 87. These include enzyme systems, temperature regulation and hormone levels in wildlife and various physiological, biochemical and behavioral changes in fish.

- Impacts of priority pollutants on fish and wildlife - EPA maintains a list of "priority pollutants" that is used in evaluating hazardous waste sites. While the presence of these substances can be detected in the environment, little is known about their impacts on fish and wildlife. Studies will be undertaken to develop information on acute or chronic toxicity of selected priority pollutants that appear to pose the greatest threat to fish and wildlife resources.

Changes for FY 1987

	FY 1987 Base	FY 1987 Estimate	Increase
Research ($000)	10,237	10,957	+720
(FTE-T)	(194)	(194)	(0)

ANALYTICAL AND COMPUTER EQUIPMENT: +$900,000/0FTEs

Two mass spectrometers will replace obsolete equipment currently being used for chemical analysis. The equipment will be utilized in analyzing samples from contaminant studies undertaken by field personnel, such as the recently completed Pecos-Rio Grande DDT and DDE assessment, sampling efforts in response to identified contaminant threats on Service lands, and sampling efforts from the ongoing biomonitoring program. Finally, the equipment will be used to analyze samples from the ongoing research program.

Presently equipment at Service laboratories is substandard. The age of the equipment makes it extremely difficult to maintain. The down time on one of the machines is already in excess of 65%. Average life expectancy of this equipment is 5-7 years, and the current equipment is 10-14 years old. The resultant delays in locating replacement parts causes extensive delays in completing chemical analyses causing extensive backlogs and preventing timely responses to contaminant issues.

The requested increase also includes a computer system for data storage and analysis proposed to be located at the Patuxent Wildlife Research Analytical Control Facility. This system will house all operational and research contaminant data as the central repository, and support nationwide statistical analysis to identify trends, problems and new research and operational questions. At present the Service has no centralized storage system for contaminant residue data. Data cannot be efficiently queried or analyzed. Many records are still kept manually. The recent study documenting selenium distribution and concentration in western lands demonstrates that a centralized data analysis/retrieval system is essential to an effective contaminant analysis process.

The object class distribution for the $900,000 is as follows:

Equipment:	
2 Mass Spectrometers	$650,000
1 Computer Base Data System	250,000
	$900,000

FATE AND EFFECTS OF CONTAMINATED SEDIMENTS IN ESTUARIES: +$320,000/0 FTEs

While the methodology exists to detect the presence of contaminants in water and sediments, little is known about the ultimate impact of these substances on fish and wildlife. In order to assess these impacts, data must be developed on the fate and effect of contaminants in sediments, that is, on how these pollutants enter a biological system and to what extent they are available to the fish and wildlife in that system, particularly through the food chain. Work has already been initiated in FY 1985 and FY 1986 on the fate and effects of contaminated sediments in freshwater. The FY 1987 enhancement proposal would permit the Service to expand this effort into estuarine areas, particularly in those locations where sediments have been disturbed through dredging, storm activity and other natural or human activities.

Specific study areas have not been identified, however, potential estuarine areas where heavy Maritime traffic and dredging activities are occurring include Boston Harbor, New York Harbor, Baltimore Harbor, Charleston Harbor, Gulf Intercoastal Water Way and other major bays such as Chesapeake, San Francisco, Galveston and Puget Sound. The first phase of this effort would be to analyze existing Corps of Engineers sediment data in an attempt to prioritize study areas and identify areas where dredging or movements of sediments are causing fish and wildlife impacts. After specfic impacts are identified, best management practices, or other mitigation techniques will be identified for use in making appropriate recommendations to action agencies. Through this process impacts to fish and wildlife resources can be mitigated or avoided altogether.

The object class distribution for the $320,000 is as follows:

Travel	$ 30,000
Other Services	200,000
Contracts	90,000
	$320,000

ACID PRECIPITATION MITIGATION DEMONSTRATION PROGRAM: -$500,000/0 FTEs

Under the proposed reduction FWS oversight involvement in the State demonstration projects will continue. Monitoring of State contracts and quality control activities will continue at the current level. Federal involvement in biological effects studies in support of the State projects will be provided at a reduced level, since these studies can be deferred by extending data analysis over a longer period of time. Examples of such studies include research on sediment dynamics, impacts of liming on toxic metal releases, impacts of liming on Atlantic salmon spawning and nursery streams, and the impacts of permitting a treated water body to re-acidify.

The object class distribution for the $500,000 reduction is as follows:

Equipment & Supplies	$100,000
Contracts	100,000
Other Services	300,000
	$500,000

BIOLOGICAL SERVICES: FY 1987, $5,071,000/111 FTEs

Objectives:

1. To develop, synthesize, and transfer ecological information to address fish and wildlife habitat and resource issues of National and regional importance and to help Service field personnel minimize or mitigate the effects of development on those resources.

2. To provide technical assistance to Service decisionmakers who use ecological information and tools to effectively manage fish and wildlife resources and their habitats.

3. To develop tools, methods, and technologies for Service personnel to improve the collection, storage, analysis and display of ecological information used in management of fish and wildlife habitats and resources.

4. To develop, refine and maintain selected existing computerized natural resource information management systems, data management systems and data bases, and training and instructional material for Service personnel. Training is also made available to other Federal agencies and States and private users on a reimbursable basis.

Base Program: The responsibilities of Biological Services include the development and application of analytical tools and methodologies, and the dissemination of research and developmental results and information, based on identified needs for fish, wildlife, and habitat resources. Biological Services will increasingly focus on the development of data concerning, and methodologies to assess, man-made and naturally occurring impacts on fish and wildlife habitats. These activities provide information that is available in the earliest planning stages to support consultation activities of FWS operational personnel.

A key part of Biological Services' efforts is to look ahead toward the development and use of new developing technologies for fish and wildlife habitat analysis and management purposes. Biological Services is also trying to minimize the dependency on large computers for use of developed methodologies. For example, the development of Habitat Evaluation Procedures (HEP) software that can be used by Regional Offices and Field Offices in microcomputers will save time and money during applications of this technology.

The Service recognizes its responsibility to manage the fish and wildlife habitat on its lands to the best of its ability. Support efforts by Biological Services such as the modification of HEP for refuge management will help meet that responsibility. At the same time, the Service recognizes that the majority of habitats that support fish and wildlife species of high Federal interest are offsite from refuges or other dedicated fish and wildlife management areas. Reliable technical information about fish and wildlife and their habitat requirements is essential if these resources are to be conserved and managed while this Nation develops its energy, mineral, water, and other resources.

FY 1985 Accomplishments:

Methods and Technology Development

This program identifies new tools that can be used to support research, operational and information transfer activities. Activities included:

- o Completed the conversion of Habitat Evaluation Procedure (HEP) accounting software for use in micro-computers and customized software to FWS regional offices (HEP is the method utilized by the Fish and Wildlife Service to quantify impacts to fish and wildlife resources and their habitats);
- o Initiated a study to determine impacts from hydropower development on fishery habitat carrying capacity;
- o Continuation of development and field validation of Instream Flow Incremental Method (IFIM) response curves with priority being given to anadromous fish and other species of special emphasis;
- o Continued development of methods and information on assessment, technical delineation, and ecological functions, values, and trends of wetlands.

Applications and technical assistance:

This area involves the application and analysis of biological information and analytical techniques to support operational units. Activities included:

- o Initiation of a study to determine the response of wintering waterfowl to habitat changes in coastal marshes of Louisiana.

- o Initiation of an evaluation of the effectiveness of FWS mitigation recommendations.

- o Development of a prototype geographical information management system for hazardous waste sites.

- o Development of fish and wildlife data bases in support of OCS leasing for Florida.

- o Continued development of wetland data bases in support of the National Wetlands Inventory.

Information transfer activities:

This area involves the dissemination of biological information and analytical tools and methodologies. Activities included:

- o Responding to technical assistance requests regarding impacts of development on living resources and the applications of new technologies.

- o Distribution of technical assistance publications, maps, etc.
- o Continued a training program for wetland data bases and other technologies developed at the labs and Teams.

- o Distribution of HSI Models available for a total of 22 species.

- o Completion and distribution of species profiles for a total of 20 commercially or recreationally important coastal aquatic organisms.
- o Continuation of HEP, IFIM and GIS training.

- o Development of 3 extension publications to translate technical research results for general public consumption.

FY 1986 Activities:

Some of the activities in the Methods and Technology Development (MTD) category that will be pursued include:

Wetland Ecology Research - A multi-year effort is being initiated to develop information about the ecology of wetlands. Efforts during the first year will focus on the delineation of transition wetlands, that is, wetlands that interface with uplands. Procedures will be developed to determine plant/soil/water relationships as a means of refining the wetlands determination methodology. The ability to precisely delineate transition wetlands will assist in the classification and identification efforts of the National Wetlands Inventory as well as operational on-the-ground activities.

Other MTD activities that will continue from past years include:

- o Maintaining and improving the scientific basis of HEP through testing and validation.

- o Continue study to determine carry capacity impacts from hydropower development.

- Expand the development of the cumulative impact assessment methodology.
- Refinement, maintenance and applications of the Geographic Information System (GIS) technology.
- Continuation of development and field validation of fish species preference curves for IFIM.
- Complete development of a fish and wildlife data base in support of OCS leasing on the Gulf Coast of Southwest Florida.
- Assist operational personnel in the development of maps, reports and other information needed to participate in interagency Port Planning efforts.

Application and technical assistance efforts in support of FWS operational units will be continued with emphasis upon Coastal Barrier Resources Act implementation issues, expansion of instream flow analyses and Habitat Evaluation Procedure Methodology applications and continued production of community, estuarine and species profiles. Information transfer will focus upon FWS operational needs for training, publication listings and synthesis reference documents.

FY 1987 Proposed Activities:

FY 1986 activities relative to methods and technology development, applications and technical assistance, and information transfer will be continued as follows:

- HEP will focus upon developing community models and using HEP as a vehicle to develop optimum fish and wildlife management prescriptions.
- Continue the development of basin wide cumulative impact assessment methodology.
- Coastal community profiles will be nearing completion.
- IFIM refinements will be interwoven with the development of community models and cumulative impact assessment.
- Emphasis upon wetland value assessment technologies for basinwide wetland impact analysis.

Justification of Program and Performance

Activity: Habitat Resources
Subactivity: Cooperative Research Units

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) From Base
Cooperative	($)	4,665	4,465	4,564	4,564	0
Research Units	(FTE-T)	(80)	(80)	(80)	(80)	(0)
Total	($)	4,665	4,465	4,564	4,564	0
Requirements	(FTE-T)	(80)	(80)	(80)	(80)	(0)

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Cooperative Research Units	4,665	-200	4,465

As a result of the $200 thousand P.L. 99-177 reduction, the Fish and Wildlife Service will limit the staffing of newly combined Fish and Wildlife Units in Virginia, Utah, South Dakota, Missouri, Maine, Florida and Colorado. The impact of this action on program effectiveness at these Units will be a decrease in the number and diversity of research projects and a reduced ability to effectively respond to requests for technical expertise and provide assistance to cooperators.

Authorization: 16 U.S.C. 753a-753b: Cooperative Unit Act. This law provides cooperative programs for research and training between the Fish and Wildlife Service, the States, universities, and private organizations.

Objectives: The FY 1987 objectives of the Cooperative Research Unit Program are to:

1. Conduct research to provide information that can be utilized to solve high priority fish and wildlife resource problems of concern to the Service, other Federal and State agencies, and universities, with emphasis on problems of National, regional, and/or state significance.

2. Transfer scientific information and provide technical assistance on natural resource management to professional biologists and managers, and to the public through writing, personal contact, and other means.

3. Educate natural resource biologists in fisheries, wildlife and related disciplines for employment as researchers and managers of fish and wildlife resources.

Base Program: In Fiscal Year 1986, the Service operated a Cooperative Unit Program at 22 combined Fish and Wildlife Units, 7 Fishery Units, and 2 Wildlife Units at 31 universities in 29 States. The Units, with State and university cooperation, carried out a diverse array of research projects of significance to the Service as well as the State and university cooperators in the Program. Research results were put to practical use by providing technical expertise and assistance to all of the Program's cooperators. Research information was made available to the public through extension publications. The research portion of the Program served as a vehicle for training new professionals as well as for developing technical information. The Cooperative Unit Program was a recruitment pool for minorities and women who are highly trained in fishery and wildlife biology.

Cooperative Units typically are catalysts for the assembly of teams that conduct research on fish and wildlife concerns to cooperating agencies. For example, in Fiscal Year 1985, in addition to the Program's Service budget, the Unit Program attracted more than $16 million of direct and in-kind support from Federal, State and private agencies to conduct research on common problems.

The following workload factors are related to the base program output of the Cooperative Units:

Measure	1985 Level	1986 Estimate	1987 Estimate
Research projects	680	646	660
Training sessions	87	83	85
Students graduated	167	159	163
Minorities enrolled	44	52	52
Scientific publications	308	293	300
Cooperative research and training equivalents in full-time students or post-graduates per year*	562	534	548

*Training is defined as graduate courses, short courses, workshops, seminars, symposia, directed study, or research taught or supervised by Unit personnel.

Number of Research Projects	1985	1986	1987
Habitat Resources			
Research	45	43	44
Biological Services	102	96	99
Wildlife Resources			
Wildlife Research	231	219	225
Fishery Resources			
Research	220	210	213
Endangered Species			
Research	82	78	79
Total	680	646	660

The moderate increases in workload factors and research projects for FY 1986 reflect the results of the combination process and associated additions of research staff through FY 1985. No further increases are expected for FY 1987 due to the inability to complete the staffing of the combined Units.

During 1985, 167 graduate professionals completed training throughout the Unit Program, and 158 (95%) are employed in Federal, State, university, or private conservation agencies, or are continuing their education.

The Units promote conservation education, including the recruitment and training of minority students, and continuing education of Federal and State biologists.

Results of research done through the Units are transmitted to appropriate Federal and State conservation agencies, and now are used in management of fish and wildlife resources across the United States.

Several examples of significant 1986 Unit accomplishments follow:

- Information on ecology of private wetlands gained by remote sensing was used in prairie wetland acquisition and protection.
- A research and monitoring project was conducted to determine the causes for the decline in populations of the Yuma clapper rail.
- Practical and academic training in fisheries and wildlife management was conducted for native Americans to enhance management on Tribal lands.
- Research on the effects of salt-water intrusion, low dams, and overflows on the ecology of coastal wetlands has led to better management of coastal marshes in the Gulf of Mexico region.

- Results of the studies on the mortality of fish passing through the turbines of low-head hydroelectric dams were made available to the public so that projects could be designed to accommodate anadromous fish passage.
- Cooperative research with Atlantic Coastal States and Canada was initiated to support Service responsibilities for management of the Atlantic Flyway population of Canada geese.
- A computer program to help refuge managers make better decisions about holding and harvesting snow geese on refuges and surrounding lands was developed.
- A practical method for measuring stress was developed to monitor the health of fish in hatchery and wild populations.
- Radiotelemetry techniques were developed and the technology transferred to Law Enforcement, where they are used for the protection of the Nation's wildlife.
- Research on black-footed ferrets was conducted to provide information needed to rear and restore this high plains endangered species.

Cooperative Research Units affected by this budget request by the Fish and Wildlife Service include:

States in which Units are combined or will be combined by September 30, 1986:

Alaska - University of Alaska
Alabama - Auburn University
Arizona - University of Arizona
Colorado - Colorado State University
Florida - University of Florida
Georgia - University of Georgia
Idaho - University of Idaho
Iowa - Iowa State University
Louisiana - Louisiana State University
Maine - University of Maine
Massachusetts - University of Massachusetts
Mississippi - Mississippi State University
Missouri - University of Missouri
New York - Cornell University
Ohio - Ohio State University
Oklahoma - Oklahoma State University
Oregon - Oregon State University
Pennsylvania - Pennsylvania State University
South Dakota - South Dakota State University
Utah - Utah State University
Virginia - Virginia Polytechnic Institute and State University
Wyoming - University of Wyoming

States with independent Units:

California - Humboldt State University (Fishery Unit)
Hawaii - University of Hawaii (Fishery Unit)
Montana - University of Montana (Wildlife Unit)
Montana - Montana State University (Fishery Unit)
North Carolina - North Carolina State University (Fishery Unit)
Tennessee - Tennessee Technological University (Fishery Unit)
Washington - University of Washington (Fishery Unit)
Wisconsin - University of Wisconsin - Stevens Point (Fishery Unit)
Wisconsin - University of Wisconsin - Madison (Wildlife Unit)

Justification of Program and Performance

Activity: Wildlife Resources Summary

(Dollar amounts in thousands)

		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Refuge Operations	($)	70,970	67,915	70,040	71,976	+1,936
	(FTE-T)	(1,651)	(1,651)	(1,651)	(1,651)	(0)
Refuge Maintenance	($)	34,584	33,097	34,166	24,299	-9,867
	(FTE-T)	(454)	(454)	(454)	(404)	(-50)
Law Enforcement	($)	10,004	9,562	9,708	9,708	0
	(FTE-T)	(195)	(195)	(195)	(195)	(0)
Wildlife Management	($)	7,346	7,030	7,289	9,180	+1,891
	(FTE-T)	(149)	(149)	(149)	(149)	(0)
Wildlife Research	($)	9,446	9,040	9,342	11,076	+1,734
	(FTE-T)	(172)	(172)	(172)	(172)	(0)
Research Maintenance	($)	1,704	1,631	1,684	1,984	+300
	(FTE-T)	(18)	(18)	(18)	(18)	(0)
Alaska Subsistance	($)	974	932	974	0	-974
	(FTE-T)	(0)	(0)	(0)	(0)	(0)
Total Current	($)	135,028	129,207	133,203	128,223	-4,980
Requirements	(FTE-T)	(2,639)	(2,639)	(2,639)	(2,589)	(-50)

Authorization: 16 U.S.C. 742a-742j - Fish and Wildlife Act of 1956. The Act of August 8, 1956, as amended, established a comprehensive national fish and wildlife policy. It authorized the Secretary of the Interior to take steps "required for the development, management, advancement, conservation, and protection of wildlife resources through research, acquisition of refuge lands, development of existing facilities, and other means."

16 U.S.C. 668dd-668ee - National Wildlife Refuge System Administration Act of 1966. This Act constituted an "Organic Act" for the National Wildlife Refuge System by providing guidelines and directives for administration and management of all areas in the system, including "wildlife refuges, areas for the protection and conservation of fish and wildlife that are threatened with extinction, wildlife ranges, wildlife management areas, and waterfowl production areas."

The FY 1987 budget request of $128,223,000 includes increases as follows:

+$1,646,000	for new refuge operations to be used to meet start up and operational costs for new or expanded refuges
+730,000	to provide for increased day-to-day needs of special programs, staff, and facilities at existing refuges
+2,000,000	to enhance waterfowl production both on and off service lands, conduct surveys, collect production data, and assist with Canada goose management
+3,051,000	to conduct research activities directed primarily at alleviating the downward trend of waterfowl populations in the U.S.
+300,000	to maintain research activities and facilities at acceptable health and safety standards
+$7,727,000	TOTAL INCREASES

The FY 1987 budget request of $128,223,000 includes decreases as follows:

-$298,000	for the Arctic Goose Education programs as teacher training and purchase of materials will be accomplished by close of FY'86
-142,000	for water rights which will be funded from base funds in FY'87
-9,489,000	for ARMM projects as ARMM funding provided thus far has been sufficient to meet the most serious maintenance needs
-378,000	for Kenai visitor facilities as the rehabilition work at this site will be accomplished by close of FY'86
-109,000	for Western Hemisphere Convention as the expansion of activities dealing with migratory birds and training in wildlife managment are complete
-297,000	for polar bear population estimates as the Service has made progress in collecting necessary data and will continue work in this area with funds remaining available
-596,000	for accelerated research on alternatives to steel shot as this level of funding is not sufficient to pursue the research necessary to meet this objective

-225,000	for Southeastern Cooperative Wildlife Disease Study as the Service now has the capability to meet its obligation to manage wildlife disease outbreaks by relying on its own laboratories
-199,000	for walrus research as current estimates of population levels are satisfactory
-974,000	to assist the State of Alaska in implementation of the subsistence program required by Title VIII of the Alaska National Interest Lands Conservation Act of 1980 as further federal funding has been determined to be unnecessary for its continuance.
-$12,707,000	TOTAL DECREASES

Justification of Program and Performance

Activity: Wildlife Resources
Subactivity: Refuge Operations and Maintenance

(Dollar amounts in thousands)

		1986 Enacted To Date	1986 Adjusted Appro.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
Operations	$	70,970	67,915	70,040	71,976	1,936
	FTE	1,651	1,651	1,651	1,651	0
Maintenance	$	34,584	33,097	34,166	24,299	-9,867
	FTE	454	454	454	404	-50
Total	$	105,554	101,012	104,206	96,275	-7,931
REQUIREMENTS	FTE	2,105	2,105	2,105	2,055	-50

Gramm-Rudman-Hollings Impact

	FY 1986 ENACTED TO DATE	P.L. 99-177 REDUCTION	FY 1986 ADJUSTED APPROP.
REFUGE O&M	105,554	-4,542	101,012

The decreases will occur primarily in staff and activities related to visitor services. The highest priorities of the NWRS will be met, including the priorities set by the National Wildlife Refuge System (NWRS) Administration Act, Endangered Species Act, Migratory Bird Treaty Act and other legislation. The Refuge Recreation Act, on the other hand, authorizes the Secretary of the Interior to administer refuges for recreational uses, when such uses do not interfere with the area's primary purpose. That is, recreational uses have been designated as secondary to the primary purposes of the refuges in the NWRS, unless recreation has been specifically designated as a primary purpose of the refuge. Since the cost of providing visitor services on the NWRS is close to $11 million, most of the initial funding costs and resultant impacts of Gramm-Rudman-Hollings will be on visitor services such as trash collection, law enforcement and visitor protection, informational brochures, environmental education programs, other on-site interpretive programs, and visitor center operations.

Authorization: 16 U.S.C. 742a - 742j - Fish and Wildlife Act of 1956 established a comprehensive national fish and wildlife policy authorizing the Secretary of the Interior to take steps "required for the development, management, advancement, conservation, and protection of wildlife resources."

16 U.S.C. 668dd - 668ee - National Wildlife Refuge System Administration Act of 1966 constituted an "Organic Act" for the National Wildlife Refuge System by providing guidelines and directives for administration and management of all areas in the system.

16 U.S.C. 3101 - The Alaska National Interest Lands Conservation Act. This Act of December 2, 1980, provided for the designation and conservation of

certain public lands in Alaska. It established 9 new and enlarged 7 existing national wildlife refuges in Alaska.

16 U.S.C. 460k-460k-4 - Recreational Use of Fish and Wildlife Areas, commonly known as the Refuge Recreation Act of 1962, authorized the Secretary of the Interior to administer refuges for recreational use when such uses do not interfere with the primary purposes for which these areas were established.

16 U.S.C. 470-470b, 470c-470n - The National Historic Preservation Act of 1966, as amended, directed Federal agencies to preserve, restore, and maintain the historic cultural environment of the Nation.

Since the establishment of Pelican Island NWR, FL, in 1903 as the first refuge, over 30 refuges have come into the System through special legislation.

Base Program: The National Wildlife Refuge System is an extensive network of Federal lands providing habitat valuable to wildlife. The System includes:

National Wildlife Refuges	FY 1985	FY 1986 Estimate	FY 1987 Estimate
Number of Refuges	432	433	433
Total Acres Managed (Millions)	88.0	88.0	88.0
Cropland (Acres)	197,521	197,521	197,521
Grassland (Acres)	2,794,542	2,794,542	2,794,542
Forest Management (Acres)	13,520,799	13,520,799	13,520,799
Road and Trails (Miles)	6,330	6,350	6,350
Canals (Miles)	2,500	2,500	2,500
Dikes (Miles)	2,635	2,645	2,645
Buildings and Facilities (Number)	3,810	3,815	3,815
Water Control Structures (Number)	1,550	1,580	1,580
Public Visitation (Millions of visits)	23.5	24.5	24.5

Waterfowl Production Areas (WPAs)*	FY 1985	FY 1986 Estimate	FY 1987 Estimate
Number of WPAs	150	152	152
Total Acres (millions)	1.7	1.7	1.7
Coordination Areas (Wildlife areas managed by States)*			
Number of Areas	58	58	58
Total Acres (millions)	0.4	0.4	0.4

*Part of the National Wildlife Refuge System which totals 89.9 million acres.

National Wildlife Refuges (NWRs). National wildlife refuges are areas of land and water which provide public benefits associated with wildlife over which the Federal Government has responsibility, particularly migratory birds and endangered species. They are staffed and managed by Service personnel and have a wider range of objectives and benefits than do waterfowl production areas and coordination areas. Some refuges are designated by the Migratory Bird Conservation Commission; some are named in Executive Orders or Public Land Orders, such as big game refuges; and some are named by authorizing statutes. Refuge locations are shown on the map on the following page.

Waterfowl Production Areas (WPAs). Waterfowl production areas are small wetland or prairie pothole areas, generally 40 to 2,000 acres, acquired pursuant to Section 4(c) of the Migratory Bird Hunting and Conservation Stamp Act. They are generally confined to the northern Great Plains States. WPAs consist of fee and easement areas. Fee areas are open to hunting, trapping, bird watching, and other wildlife-oriented recreation unless closed by regulation. Easement areas are under control of landowners, except that drainage, burning, or filling of the wetlands are prohibited. WPAs acquired in Iowa, Michigan, and Wisconsin are managed under cooperative agreements with the respective States.

Coordination Areas (State-managed). These federally owned areas are managed by States as wildlife management areas under cooperative agreements with the Service. The Service reviews State management plans and manages the real property interests.

Description of Major Refuge Categories. Resource management on national wildlife refuges and on waterfowl production areas is comprised of two major categories: (1) Operations and (2) Maintenance. The following discussions identify the objectives and provide descriptions of the work accomplished in each. Since Operations in Alaska are different from those in the rest of the nation, Alaska refuges are discussed separately. A single discussion of Maintenance will suffice since differences between Alaska and the lower 48 states are primarily related to the magnitude of the tasks.

OPERATIONS ($70,040,000/1,651 FTE)

Goals of the National Wildlife Refuge System. The following broad goals of the NWRS describe a level of responsibility and concern for the Nation's wildlife resources for the ultimate benefit of people.

A. To preserve, restore, and enhance in their natural ecosystems (when practicable) all species of animals and plants that are endangered or threatened with becoming endangered.

B. To perpetuate the migratory bird resource.

C. To preserve a natural diversity and abundance of fauna and flora on refuge lands.

D. To provide an understanding and appreciation of fish and wildlife ecology and man's role in his environment, and to provide refuge visitors with high quality, safe, wholesome, and enjoyable recreational experiences oriented toward wildlife to the extent these activities are compatible with the purposes for which the refuge was established.

OPERATIONS - REFUGES EXCLUSIVE OF ALASKA: ($57,713,000/1,539 FTE) - Service operations are discussed under nine categories. The percentage of operational base funds devoted to each category are identified.

Marsh and Water Management (37%) - Water management on refuges varies considerably and includes management of lakes, streams, marshes, reservoirs, bays, lagoons, and tidal pools. Some refuges, particularly those in the West, must operate within limits established by State water-rights laws and local irrigation districts which dictate the amount of water available to the refuge.

Marshes are a prominent physical feature of many refuges and are extremely important to waterfowl management. Highly productive marshes may be created and maintained by systems of dikes, pumps, and water control structures.

Individual units may be managed to serve specific requirements of wildlife such as nesting, feeding, resting, or sanctuary areas for waterfowl or for specific species of wildlife or plants.

Another management technique has been the development of "greentree reservoirs" on refuges. Low level dikes are constructed around blocks of mast-producing trees to permit flooding during winter months when the trees are dormant. Waterfowl use these areas extensively, feeding on seeds, mast, and emergent plants in the shallow impoundments.

Grassland Management (8%) - Along the Gulf Coast, the strategy is to reduce vegetation height and old growth to provide sites where geese can browse the short green forage. In other sections of the country, grassland is managed to maintain the necessary variety of vegetation, thus providing habitats for a diversity of wildlife species. Although primary emphasis is given to maintaining optimum habitat for ground-nesting waterfowl and other birds, other wildlife also benefit from this management such as antelope, buffalo, elk and deer.

Haying and grazing are permitted if they are compatible with wildlife management objectives.

Forest Management (16%) - Refuge forests are managed to provide suitable habitats for a variety of wildlife species. Such management may include controlled burning, treecrushing, or commercial harvesting to set back plant succession to stages that support the desired wildlife species. In other areas, the goal may be to maintain climax forests or certain forms of over-aged or diseased trees which support species like bears, martens, wood ducks, and red-cockaded woodpeckers.

Natural Area Management (5%) - Wilderness and natural areas provide varied recreational and scientific benefits to the public. They also provide the essentially undisturbed environment required by species. Such areas also serve as standards against which to assess the effects of management on other lands. Nationwide, there are approximately 20 million acres of wilderness, 2 million acres of research natural areas, and 200 thousand acres of public use natural areas on refuges.

Cropland Management (8%) - The primary objective of cropland management is to supplement natural food and cover for wildlife and to help alleviate wildlife depredation on adjacent private lands. Farming operations are conducted by refuge personnel or by permittees. Commonly, the refuge portion, under a sharecrop arrangement, is left standing in the fields for wildlife use.

Currently available data show that approximately 93,000 acres are cultivated on 93 refuges and 15 wetland management districts. Refuge personnel farm approximately 8,500 acres, and 536 cooperators farm the remaining 84,500 acres. The estimated value of the refuges' share of cooperatively grown crops is $3.0 million. The estimated market value of the cooperators' share of crops is nearly $9.0 million.

Fire Management (3%) - Fire management on national wildlife refuges covers a broad range of activities from training, prevention, presuppression, and suppression, to the use of fire as a tool to meet resource objectives and reduce hazardous fuel levels.

Fire management is made complex by diversity of geographic terrain, cover types and fuels, ranging from Alaskan tundra to Florida sawgrass. The objectives of the fire management program are to protect and enhance habitat for fish and wildlife production and diversity.

In calendar year [illegible], [illegible] wildfires impacted [illegible] acres of refuges. Included in this total are the Alaska fires which were reported as [illegible] fires. Additionally, there were [illegible] prescribed burns on [illegible] acres.

The [illegible] refuges that use prescribed fire or on which a wildfire is likely to occur are required to prepare a fire management plan. The plans are reviewed by the Service's Fire Management Coordinator and approved by Regional Directors. In FY [illegible], [illegible] acres of prescribed burning are planned on [illegible] refuges.

Refuge Fire Management officers provide a cadre of expertise and provide a reservoir of instructors to keep all employees qualified. The officers are qualified fire personnel capable of responding to fire emergencies both on and off Service lands.

The Service has used the National Interagency Fire Qualifications System (NIFQS) as the basis for qualification of refuge employees to fight fires. NIFQS training was developed for large fire organizations. The Service needed more skills and knowledge in initial attack, small fire management, and prescribed burning. Accordingly, during FY [illegible], a Service specific basic fire course was developed which is equivalent to the required S-130 and S-190 NIFQS courses. The Service has included prescribed fire training as an integral part of this new course. Also during the past year, the Service has formally adopted the National Interagency Incident Management System to replace the NIFQS large fire organization. Training associated with this conversion is now underway with full implementation scheduled for FY [illegible].

NUMBER OF EMPLOYEES COMPLETING TRAINING

TYPE OF TRAINING/COURSES	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
Basic Firefighter S-130 & S-190	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Refuge Fire Schools	–	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Specialized-chainsaw, fireplow	–	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Intermediate Level Courses	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Fire Management Orientation	–	–	–	–	–	[illegible]
Pre-suppression and Prescribed burn workshops	–	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Non-suppression Fire Management	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Incident Command System (NIIMS)	–	–	–	[illegible]	[illegible]	[illegible]

Expenditures by Major Categories	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
			($000)			
Equipment purchase/replacement	[illegible] 1/	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Training	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Operations and Maintenance	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL $	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Operations TOTAL FTE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Supplemental funds
2/ Does not include $1.5 million construction funds for equipment purchases

The Service established a full-time fire position at the Boise Interagency Fire Center (BIFC) in 1979. By FY 1983 the demands on that position required three additional staff members in order to furnish the level of assistance needed by refuges in fire planning, administration of the qualification system, training, and equipment purchases.

Public Use Management (10%) - Public use programs are developed primarily to foster activities directly associated with the observation, interpretation, and understanding of fish and wildlife populations, their habitats, and values. Refuges provide trails and boardwalks for visitor use and enjoyment as well as observation towers, auto tour routes, slide and film presentations, exhibits, demonstrations, and other interpretive programs. Refuges also offer such activities as fishing and hunting. Other recreational uses include camping, backpacking, picnicking, swimming, boating, hiking, and other similar activities not necessarily requiring the presence of fish or wildlife.

Significant progress has been made over the past several years in accommodating and encouraging compatible public uses. Many refuges have opened new or expanded existing areas to increase hunting and fishing opportunities. In FY 1985, the Service initiated 15 new hunting programs on 7 refuges and new fishing programs on 14 refuges. Some existing refuge hunting programs were modified to provide longer hunting seasons, more acreage open to hunting, and more species available for hunting.

The development of visitor facilities and the promotion of onsite programs have markedly enhanced the experience of visitors to national wildlife refuges.

The level of public use activities on refuges nationwide is listed below.

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC USES

Activity	Estimated FY 1986 Levels Visits
I. Interpretation (auto tours, visitor centers, exhibits and self-guided wildlife trails)	6,710,000
II. Environmental Education (students and teachers)	260,000
III. Hunting (migratory birds and resident game)	1,300,000
IV. Fishing (warm/coldwater, fresh and salt water)	5,200,000
V. Wildlife Observation (photography, field trails)	14,400,000
VI. Camping, ORVs, Other Non-Wildlife (camping, picnicking, swimming, boating, waterskiing)	3,200,000
VII. Other Consumptive Wildlife Recreation (trapping, crabbing, clamming)	850,000
TOTALS	31,920,000

Historic and Archeological Resource Management (1%) - Refuges contain a broad range of historic and prehistoric cultural resources that are worthy of conservation and study and designation in the National Register. Such resources are being identified on refuges to meet legal responsibilities in advance of potentially disruptive projects.

Regulatory Activities Related to Refuges (12%) - Regulations governing the general administration of refuges, the issuance of permits, and other administrative aspects of refuges are found in 50 CFR Parts 25 through 36. Executive Order 12291 and the Department's implementation instructions will continue to require centralized regulatory management by the Service.

Routine law enforcement activities to assure compliance with refuge regulations vary and include the normal enforcement problems associated with wetland easements, hunting and fishing, protection of government and personal property, and public safety. Special enforcement problems arise periodically, requiring the full range of law enforcement capabilities. Refuge personnel with law enforcement authority must occasionally deal with incidents involving homicides and other felonies.

FY 1985 Accomplishments: The Service continued a Volunteer's Program under which both professional and non-professional volunteers donate their service. Volunteers are working at refuges and regional offices accomplishing a full range of activities, including clerical and administrative support and professional biological tasks. Coordination often takes place through local and State organizations, schools, and agencies. We received a total of approximately 550,000 hours of contributed time in FY 1985, equivalent of 300 staff years, worth approximately $3,700,000 based on a GS-5, step 1 salary. Unlike the National Park Service (NPS), the Service has no specific budget allocation for its volunteer program. Since volunteers are used to compliment ongoing programs, funding support from within the resource management funding base is considered appropriate and desirable. While accounting procedures do not capture the costs associated with the program, project leaders generally view the investment as significant (estimated at more than $100,000 nationally).

The Service's major emphasis for the Refuge System, in FY 1985, was in the resolution of contaminants and other resource problems on refuges, on continued improvement of maintenance, and for improvement of interpretation and education programs on refuges. The Service will continue in its leadership role to increase public awarenesss as a means of conserving, protecting, and enhancing wildlife and habitat. The information and education program on refuges is the main avenue for accomplishing this goal.

The Service spent $6.5 million on refuges exclusive of Alaska in FY 1985 to address resource problems such as water quality, toxic waste disposal, noxious weed control, other forms of habitat deterioration, and a wide variety of other problems. Of this total, $3.6 million was allocated to projects from resource management funds, while 2.9 million was allocated from construction funding for more intensive projects, such as repairing flood damage or replacing water control structures.

In response to Congressional directives for FY 1985, the following actions are being/have been taken:

- An additional $300,000 was allocated to Caribbean Island Refuge for operations and maintenance. Management plans are being developed. An assistant manager was hired and a biologist position was filled to help with the plans.

- $50,000 has been provided to Bogue Chitto NWR for Refuge O&M. A biologist was selected to fill the refuge's biological needs and to serve coastal refuges in LA and MS.

- The National Wildlife Refuge System had 2,008 FTEs in FY 1985, an increase of 131 FTEs over FY 1984. This increase of FTEs, plus additional funds received for FY 1985, permitted the Service to continue to address high priority maintenance and operation needs, including resolution of refuge resource threats.

- The Service committed $1,000,000 to address the toxic waste problem at Crab Orchard NWR, IL. The Remedial Investigation Feasibility Study, conducted as the initial step in correcting the toxic waste problem, is on schedule. This study analyzes soil, water, sediment and fish collected at Crab Orchard NWR for a broad range of contaminants, including chemicals, such as PCB's, and heavy metals, such as lead.

- The Service conducted a Youth Conservation Corps program in FY 1985 at the $3.2 million level. A total of 1,733 enrollees participated at 317 stations, 80 percent of which were refuges.

- The Service continued its efforts to protect whooping cranes on the Bosque del Apache Refuge through control of goose hunting activities where/when cranes are present. Safeguards include the stategic positioning of observers to monitor crane movements during the hunt and electronic communications with hunters at all times. No whooping cranes were lost as a result of hunting activities.

FY 1986 and FY 1987 Emphasis--Refuges Exclusive of Alaska
In addition to enhancement of general refuge operations and training capabilities, the Service will continue upgrading information and education programs on refuges.

Emphasis will continue on resolving resource problems on refuges. In FY 1986 $4.0 million ($4.8 million including Alaska) will be allocated to projects that are needed to resolve serious problems, such as contaminants, that have been adversely affecting the resources on refuges. Greater emphasis will be placed, in FY 1987, on identifying and addressing these problems at the earliest possible stages and on preventing major problems from developing.

OPERATIONS--ALASKA REFUGES ($12,327,000/112 FTE)
Most of the refuge program in Alaska is directed toward meeting mandates of the Alaska National Interest Lands Conservation Act (ANILCA) of 1980. The Service provides basic resource protection and administers public and economic use programs on Alaska National Wildlife Refuges. Final comprehensive conservation plans (CCPs) for four refuges (Kenai, Becharof, Alaska Peninsula, Izembek) have been completed. Four draft plans (Togiak, Tetlin, Yukon Flats and Kodiak) were released for public comment in FY 1985. Plan development, initiated in FY 1984, for another three refuges (Kanuti, Koykuk, Yukon Delta), is near completion. The remaining plans for five refuges (Nowitna, Innoko, Arctic, Alaska Maritime, and Selewik) will be completed in 1987. Wilderness review for all refuge lands coincides with the development of the CCPs. The initial effort to complete CCPs for the four refuges in the Bristol Bay area stems from a commitment made to the State of Alaska by the Department of the Interior to provide major biological, administrative, research, and planning support for the Bristol Bay Regional Management Plan. Cooperative barren-ground caribou studies on the Arctic Refuge with the State of Alaska and the Yukon Territory will continue.

The Service continues to address subsistence provisions of Title VIII of ANILCA by working with local entities to better define "subsistence" uses and needs and obtaining cooperative agreements; by assessing the anticipated and realized effects of land use decisions on subsistence harvest of migratory birds; and by managing Service lands in a manner conducive to providing subsistence opportunities. The Service will continue to manage, on an interim basis, refuge lands selected and scheduled for conveyance to the State and to natives.

Under Title X of ANILCA, the Service will continue to monitor the effects of oil and gas exploration activities on natural resources and lifestyles of the Arctic Refuge coastal plain.

Refuges in Alaska, other than the Arctic, will be evaluated for areas in which the Service may allow oil and gas exploration/development as part of the CCP process.

Access to refuge inholdings must be assessed and provided. The Service will continue to participate in and lend support to the Alaska Land Use Council.

The Service has Title XIII responsibilities as follows: land exchanges; cabin policy implementation; acquisition of refuge administration sites; implementation of local hire program; coordination of the Terror Lake hydropower agreement.

The resource program on national wildlife refuges in Alaska also includes grassland, forest, natural area, fire, public use, and cultural resource management.

The Service manages 47,569,000 acres in Alaska that are considered subject to wildfire. Alaska fire protection is provided through a memorandum of agreement with BLM. To reflect the true costs of agency operations in Alaska, a transfer of $340,000 from BLM base to FWS base is included. These funds will be used for BLM fire protection costs on an annual basis under the established memorandum of agreement.

FY 1985 Alaska Accomplishments. The Service spent $1.3 million to address resource problems such as water quality, toxic waste disposal, noxious weed disposal and ecological monitoring. The Service will spend approximately $1 million on baseline assessments of wildlife, habitat, cultural resources, and effects of oil and gas activities on natural resources on the Arctic Refuge Coastal Plain. Cooperative barren-ground caribou studies with the State of Alaska and the Yukon Territory continue. Finally, the Service will continue to address subsistence provisions of ANILCA.

FY 1986 and FY 1987 Alaska Emphasis: ANILCA Section 1002 requires continuing inventories and assessments of all natural resources, including fish and wildlife, and a program of surface exploration for oil and gas on the coastal plain of the Arctic National Wildlife Refuge. During FY 1985 the final phases of field surface exploration were completed and work has began on developing the Secretary's report to Congress. The Service expects to spend approximately $400,000 in FY 1986 on this effort.

Another major thrust in Alaska will be the development of step down management plans and the implementation of priority projects identified in the comprehensive conservation plans that were completed in FY 1985 (Kenai, Becharof, Izembek, Alaska Peninsula). Management will detail the processes and procedures for accomplishing such responsibilities as subsistence, transportation and utility systems, access, and identifying stipulations needed to make certain that uses are compatible with refuge purposes.

Under ANILCA Section 1008, certain areas on refuges may be opened to oil and gas leasing following completion of the comprehensive plans. In addition, some 400 mineral lease offers on the Yukon Flats NWR and 330 on the Yukon Delta NWR have been made by industry. In order to make intelligent wildlife management decisions regarding oil, gas, and mineral leasing and post-development phases of oil and gas activities and to facilitate energy production, specific information on the wildlife habitats and resources are needed.

MAINTENANCE: ($34,166,000/454 FTE)

Objectives: The Service maintains wildlife habitat, wildlife populations, facilities and equipment:

1. To optimize the wildlife management programs through an effective and efficient maintenance plan.

2. To provide a quality experience for the public through a management program that is committed to safety, utility, and aesthetics.

3. To provide facilities and equipment adequate for their purpose and safe for the user.

The Service has a capital investment of $2.2 billion in refuge facilities and equipment. Health and safety for employees and the visiting public will continue to be the highest priority for refuge maintenance funds. Examples of health-related maintenance activities are the upkeep of sewage treatment plants and domestic water supply systems. Safety-related examples include road maintenance (repairing potholes, improving shoulders, etc.), proper care of vehicles and equipment, and maintenance of electrical systems to proper standards.

Maintenance is discussed under seven categories and the approximate percentage of base maintenance funds devoted to each category is shown.

Managed Waters Maintenance (30%) - Maintenance of managed waters includes all maintenance of vegetation, dikes, dams, roads, and water control structures associated with the management of marsh and water areas where the water supply is controlled. Throughout the Refuge System there are over 1,500 major water control structures valued at more than $10,000 each. There are countless smaller structures and spillways and approximately 2,500 miles of canals and 2,600 miles of dikes. Many new structures, roads, dams, and dikes were constructed under the Bicentennial Land Heritage Program (BLHP) between 1977-1981 and regular maintenance is necessary, not only to keep them operational, but to protect the significant public investment.

Without these intensively managed habitats, the National Wildlife Refuge System's capacity to produce and nourish waterfowl and shorebirds would be severely diminished.

Natural Wetlands Maintenance (8%) - This maintenance category includes all maintenance of vegetation, roads, structures, and fences necessary for the purpose of managing natural wetlands for specific fish, wildlife, or plant production. Vegetation maintenance is a continuing effort where certain vegetative types must be maintained for nesting (i.e., dense nesting cover or prairie grasses) or feeding (i.e., mast production or grain production). This is done by burning, farming, grazing, haying, timbering, the reseeding of grasses, and removal of undesirable plant species. These areas are primarily waterfowl production sites in the northern prairies and Alaska that are significant contributors to this Nation's waterfowl production. Most shore and waterbirds are dependent at some point in their life cycle on Refuge System natural wetlands.

Managed Uplands Maintenance (10%) - Maintenance of uplands encompasses all grasslands, forestlands, and croplands and all the types of vegetation associated with habitat managed for wildlife. This type of maintenance is particularly important because it assures the perpetuation of the type of habitat for which the area was established as a national wildlife refuge. General examples of vegetation maintenance in uplands include reseeding of grasses or other desirable vegetation and removal of undesirable plants, usually weedy or introduced species, to maintain desirable habitat.

Uplands maintenance also includes all maintenance of roads, structures, and fences associated with the management of uplands. This maintenance is necessary to ensure continued vegetation management by farming, grazing and timbering operations where these activities are appropriate.

Wildlands Maintenance (2%) - Wildlands maintenance includes upkeep of all roads, gates, fences and signs, plus the surveillance essential for the protection and management of wildlands. These are areas where natural processes are allowed to proceed uninterrupted, and many are designated natural areas that need protective management. Certain roads also may be needed on wildlands to protect human health and safety.

Wildlife Populations Maintenance (5%) - Wildlife populations are the principal resource of national wildlife refuges and serving the needs of those populations is the primary responsibility of the Refuge System. Success of refuge operations is largely measured in terms of wildlife populations and their response to management.

Population/habitat assessment involves censuses and surveys of wildlife populations and their habitats. This includes assessment of reproductive success, establishment of survival rates, and determination of mortality. It also includes assessment of wildlife habitat needs and responses to habitat manipulations, and the management of economic and public uses to ensure compatibility with the primary purpose of the refuge. This would include the proper development, operation, and maintenance of roads, facilities, structures, and fences established for the purpose of controlling public, economic, and energy use impacts on wildlife populations.

Facilities Maintenance (25%) - This category includes all buildings, structures, roads, trails, bridges, and fences which support overall refuge operations. The refuge headquarters with associated improvements provides an excellent example of maintenance in this category, since all the various improvements contribute to accomplishment of refuge goals and objectives.

Recurring maintenance tasks include painting, replacing roofs, fixing water and sewage and other utility systems, and gravelling or resurfacing parking areas. Other regular maintenance tasks include housekeeping associated with employee and visitor facilities.

Vehicles and Equipment Maintenance (20%) - This category includes all maintenance on vehicles and equipment used for general management purposes on refuges. Pickup trucks, cargo trucks, passenger cars, communications equipment and a wide variety of powered equipment for refuge shops are included in this category. Specialized vehicles and pieces of equipment such as tractors, mowers, road graders, draglines, and motorboats, are also included.

Refuge personnel accomplish all of the routine maintenance plus a significant amount of more complicated servicing and repairs.

FY 1985 Accomplishments: The Accelerated Refuge Maintenance Management (ARMM) thrust begun in FY 1984 enabled the Service to make significant progress toward meeting its maintenance needs. Total ARMM funding in FY 85 was $17.2 million.

Within available funding in FY 1985, the Service conducted a Youth Conservation Corps program at $3.2 million level. Wildlife Resources share of the $3.2 million was $2,500,000. Funds provided for Accelerated Resource Maintenance Management in the amount of $508,000 were utilized for YCC. Additional funding was provided by Refuge O&M. A total of 1,733 enrollees were employed at 317 sites, 80 percent of which were refuges.

FYs 1986 & 1987 Emphasis: The Operations and Maintenance thrust is allowing the Service to continue improved maintenance and rehabilitation of facilities and equipment, give more attention to resource protection and maintenance, and expand opportunities for the public to understand and appreciate fish and wildlife.

Greater emphasis on better stewardship of wildlife resources will require increased emphasis on wildlife population and habitat maintenance. Additionally, the Service will fund projects of various magnitudes to assure proper maintenance of all Service resources.

Increase/Decrease From FY 1987 Base

FY 1987 Increase/Decrease	1987 Base $000/FTE	1987 Estimate $000/FTE	Change
Operations			
New and Expanded Refuges Operations	2,605/85	4,251/85	+1,646/0
Existing Refuges	66,768/1565	67,498/1565	+ 730/0
Arctic Goose Educ. Program	350/1	52/1	- 298/0
Water Rights	317/0	175/0	- 142/0
TOTAL	70,040/1651	71,976/1651	+1,936/0
Maintenance			
Maintenance	33,788/454	24,299/404	-9,489/-50
(ARMM)	(18,251/50)	(8,762/0)	(-9,489/-50)
Kenai Visitor Facilities	378/0	0/0	-378/0
TOTAL	34,166/454	24,299/404	-9,867/-50

New and Expanded Refuge Operations ($1,646,000/00)

Twenty new national wildlife refuges have been established since 1983, and other refuges expanded, yet there has been little or no base funding for operation of these new and expanded refuges during this period. Instead, funding increases have concentrated on maintenance needs. Operational costs for these new or expanded areas have been absorbed within Service base funding, thus eroding base operational funding for existing refuges.

The funds provided for new refuges will be used to manage these refuges for the primary purposes for which the areas were established. Many of these new refuges were established to protect rapidly deteriorating habitat to preserve endangered species. In these areas, the funding would be used to stop the deterioration of habitat by managing canals, removing feral animals, maintaining dikes, managing water levels, posting, and providing enforcement and administration necessary to protect the habitat and wildlife.

Funds for expanded refuges will be used to manage these areas to better meet the primary purposes for which the refuges were acquired and expanded. Expansion at these refuges was necessary to improve the capability of these areas to support wildlife by restoring tidal marshes; expanding habitat management for threatened species or species of special interest, such as the roseate tern; providing visitor information facilities to further protect bald eagles and other species in critical areas; develop water management capabilities; and to fulfill cooperative agreements to most efficiently meet the legislated objectives of the areas.

State/Station	($000)	
	Base	Increase
Alabama		
Bon Secour NWR	43	100
Arizona		
Buenos Aires NWR	0	250
San Bernardino NWR	40	135
California		
Tijuana Slough NWR	0	50
Connecticut		
Connecticut Coastal NWR	0	80
Hawaii		
Kealia Pond NWR	0	29
Upper Hakalau NWR	0	54
Louisiana		
Bogue Chitto NWR	117	151
Maine		
Petite Manan NWR	82	49

State/Station	($000)	
	Base	Increase
Minnesota		
Detroit Lakes WMD	243	24
Fergus Falls WMD	269	25
Litchfield WMD	304	24
Morris WMD	229	24
Nevada		
Ash Meadows NWR	0	50
Moapa Valley NWR	0	50
North Carolina		
Alligator River NWR	0	239
Oregon		
Bear Valley NWR	0	17
South Dakota		
Lake Andes WMD	204	22
Madison WMD	170	27
Sand Lake WMD	168	25
Wanbay WMD	193	26
Texas		
Big Boggy NWR	30	107
Brazoria NWR	365	18
Rio Grande Valley NWR	148	70
TOTAL INCREASE		$1,646

Distribution of Change by Object Classification

The object classification detail for the proposed $1,646,000 increase is as follows:

Communications, Utilities, and Other Rent	$122,000
Transportation of People	29,000
Transportation of Things	23,000
Other Services	410,000
Supplies and materials	942,000
Equipment	120,000
TOTAL	$1,646,00

Operational Funds for Existing Refuges ($730,000)

Although existing refuges have received funding increases over the last few years, funds have been designated by Congress for specific purposes. Funds have not been provided for continued operation. These increases have all been beneficial to the Refuge System, but have not addressed another real need--the day-to-day management of refuges. For example, BLHP, ARMM, and Jobs Bill funding provided needed facilities and equipment that improved the management capability of the refuges. However, no operational funding was provided to pay for utilities, supplies, materials, upkeep or other costs associated with the use of these facilities or equipment. Similarly, funding for BLHP, resource problems, and Jobs Bill provided the means to do significant wildlife habitat improvement projects, but funds for equipment and fuel expenditures to continue the work have not been provided. Although staffing on refuges is generally adequate, increased funds to provide materials, supplies, utilities and support services are necessary but often unavailable to properly manage these refuges. The amount of $600,000 would be required to meet the general operational requirements to support the increased day-to-day needs of the increase in special programs, staff, and facilities at existing refuges.

During FY 1984, national wildlife refuges received over 4.5 million sport-fishing visits. Active fishery resource management is conducted on 140 refuges in order to meet refuge objectives and benefit the sport-fishing public. By the end of FY 1985, over half of these 140 refuges will have approved fishery management plans. Implementation of a portion of these plans will require an additional $25,000 for habitat manipulation, restoration of refuge fisheries, and monitoring activities.

A variety of environmental problems on refuges have been discovered. The Service is concerned that other problems exist, but their scope and magnitude cannot be determined without extensive monitoring and testing programs. Many refuges are reporting potential water quality and other contamination problems, the severity of which is unknown. These may be caused by industrial and municipal waste, agricultural, mining, military, and oil and gas activities.

An additional $50,000 would be used in small increments for low cost monitoring efforts to adequately identify where bonafide problems exist. Ultimately, the Service will develop a monitoring "safety net" that will assure the continued viability and integrity of all refuge environments.

Nine Alaska refuge comprehensive conservation plans (CCP) will be completed by the start of FY 1987. To implement these broad plans, detailed strategies will have to be developed in refuge management plans. The plans will outline how wildlife habitat, public use and commercial use of the refuge will be managed. For example, a number of the CCPs contain provisions for oil and gas development. Many of these refuges will then also require individual oil and gas management plans, environmental documentation of the impacts of proposed uses, and a determination of their compatibility with refuge purposes. The types and number of other management plans will depend on the needs of each refuge. Types of plans include: fire management plans, public use management plans, wilderness management plans, forest management plans, grassland management plans and oil and gas management plans. A total of $55,000 will be required to initiate these management plans.

Increased funds for refuge operations will be provided to the following refuges:

	($000)
ALABAMA	
Choctaw NWR	5.0
ALASKA	
Togiak NWR	40.0
Alaska Penninsula NWR	20.0
Nowitna NWR	30.0
Koyukuk NWR	35.0
Becharof NWR	20.0
Kanuti NWR	16.0
ARIZONA	
Cabeza Prieta NWR	2.0
Cibola NWR	2.0
Havasu NWR	5.0
Imperial NWR	3.0
Kofa NWR	5.0
ARKANSAS	
Wapanocca NWR	10.0
CALIFORNIA	
Klamath Basin NWR	10.0
Sacramento NWR	10.0
San Luis NWR	10.0
Kern/Pixley NWR	8.0
COLORADO	
Arapaho NWR	5.0
Alamosa/Monte Vista NWR	5.0

	($000)
DELAWARE	
Bombay Hook NWR	8.0
Prime Hook NWR	4.0
FLORIDA	
Chassahowitzka NWR	25.0
HAWAII	
Hawaiian Pacific Island Complex NWR	4.0
ILLINOIS	
Chatauqua NWR	20.0
Calhoun NWR	10.0
IOWA	
McGregor	10.0
KANSAS	
Quivira NWR	5.0
LOUISIANA	
Lacassine NWR	9.0
Sabine NWR	8.0
MAINE	
Rachel Carson NWR	2.0
MASSACHUSETTS	
Parker River NWR	8.0
MICHIGAN	
Seney NWR	5.0

MINNESOTA	
Upper Mississippi NWR	5.0
Detroit Lake WMD	5.0
Fergus Falls WMD	5.0
Litchfield WMD	5.0
Morris WMD	4.0
MISSISSIPPI	
Mississippi Sandhill Crane NWR	20.0
MISSOURI	
Squaw Creek NWR	10.0
MONTANA	
National Bison Range	5.0
Bowdoin NWR	8.0
Medicine Lake NWR	8.0
Benton Lake NWR	5.0
NEVADA	
Stillwater NWR	19.0
NEW JERSEY	
Forsythe-Brigantine NWR	8.0
Forsythe-Barnegat NWR	5.0
Great Swamp NWR	16.0
NEW MEXICO	
Bitter Lake NWR	2.0
Bosque del Apache NWR	7.0
Sevilleta NWR	2.0
Las Vegas NWR	4.0
NORTH CAROLINA	
Mattamuskeet NWR	10.0
NORTH DAKOTA	
Devils Lake NWR	10.0
Des Lacs NWR	10.0
J. Cark Salyer NWR	10.0
Kulm NWR	5.0
OHIO	
Ottawa NWR	10.0
OKLAHOMA	
Salt Plains NWR	3.0
Sequoyah NWR	3.0
Tishomingo NWR	3.0
Washita NWR	3.0
Optima NWR	2.0
Wichita Mountains NWR	6.0
OREGON	
Malheur	23.0
RHODE ISLAND	
Ninigret NWR	7.0
SOUTH CAROLINA	
Cape Romain NWR	10.0
Santee NWR	7.0
SOUTH DAKOTA	
Madison WMD	8.0
Sand Lake NWR	8.0
Waubay NWR	8.0
Lake Andes NWR	6.0
TENNESSEE	
Cross Creek NW	10.0
TEXAS	
Muleshoe NWR	3.0
Buffalo Lake NWR	3.0
Anahuac NWR	3.0
McFaddin NWR	2.0
Aransas NWR	4.0
Attwater Prairie Chicken NWR	3.0
San Bernard NWR	3.0
Laguna Atascosa NWR	3.0
Santa Ana NWR	4.0
Hagerman NWR	3.0
VERMONT	
Missisquoi NWR	2.0
VIRGINIA	
Chincoteague NWR	10.0
Dismal Swamp NWR	9.0
Mason Neck NWR	4.0
WISCONSIN	
Horicon NWR	10.0
	$730,000

Distribution of Change by Object Class
The object class detail for the proposed $730,000 increase is as follows:

	Amount
Communications, Utilities, and other rent	44,000
Transportation of People	11,000
Transportation of things	5,000
Other Services	136,000
Supplies and Materials	499,000
Equipment	35,000
Total	$730,000

Arctic Goose Education Program (-298,000/0 FTE)

In FY 1985, the Service, at Yukon Delta NWR, initiated an aggressive program to address management concerns about the wildlife subsistence uses engaged in by Yupik Eskimos living within and adjacent to the refuge. Of special concern was the impact on Arctic nesting geese populations and their productivity. Ten local bilingual natives were hired as refuge information technicians to serve as liaison between the refuge and 52 villages. An additional $298,000 was provided in FY 1986 to continue to expand on going activities. The additional funds are being used to provide native village teacher training, both elementary and secondary school education programs and materials, and a semi-technical comprehensive goose information guide. It is anticipated that teacher training and purchase of materials will be accomplished by September 1986; funds for that purpose will no longer be needed. A reduction of $298,000 is proposed in FY 1987. The remaining funds are adequate to provide for the information technicians to continue in their roles as liaison between the refuge and the villages.

Distribution of Change by Object Class
The object class detail for the proposed $298,000 decrease is as follows:

	Amount
Transportation of People	-30,000
Transportation of Things	-15,000
Other Services	-60,000
Supplies and Materials	-193,000
Total	$-298,000

Water Rights (-142,000, 0 FTE)
The Service proposes to discontinue the increase provided in FY 1985 for justification of Federal reserved water rights in the 17 contiguous western States. Protection of water rights essential to sustain waterfowl maintenance, waterfowl production, and other migratory bird maintenance benefits will be funded by base funds of $175,000. Several small projects can be deferred without adverse impact on the resource.

Distribution of Change by Object Class
The object class detail for the proposed $142,000 decrease is as follows:

	Amount
Transportation of People	-22,000
Other Services	-80,000
Supplies and Materials	-40,000
Total	$-142,000

ARMM (-9,489,000/ -50 FTE)

Maintenance funding provided by ARMM, since its inception, totals $48 million — $14.6 million in FY 1984, $15.6 million in FY 1985, and $17.8 million in FY 1986. ARMM funds have been used for such maintenance projects as rehabilitating impoundments and water management facilities, replacing roofs and other building components, repair or replacement of utility systems including sewage treatment plants, water wells, and communication systems and maintenance or replacement of equipment. Through long-range planning, the ARMM funding thus far appropriated by Congress has been sufficient to address and resolve the most serious maintenance needs. The proposed ARMM budget reduction for FY 1987 would reduce the level of ARMM from $18.3 million to $8.8 million — a decrease of $9.5 million.

However, with the funds already provided by ARMM, the most serious maintenance needs for the National Wildlife Refuge System have been met. The funding level proposed for FY 87 will be sufficient to accomplish the highest priority needs.

Distribution of Change by Object Class

The object class detail for the proposed $9,489,000 decrease is as follows:

	Amount
Personnel Salary Costs	-973,000
Personnel Benefits	- 95,000
Transportation of People	- 33,000
Transportation of Things	- 25,000
Other Services	-4,505,000
Supplies and Materials	-3,848,000
Total	$-9,489,000

Kenai Visitor Facilities (-378,000/0 FTE)

The Service is managing Kenai NWR, including its wilderness area, for continuing public benefits in accordance with the Wilderness Act, ANILCA, Service Policy and the Kenai Comprehensive Conservation Plan (CCP). An additional $378,000 was provided in FY 1986 to rehabilitate the public use facilities on the refuge. Accomplishments scheduled for FY 1986 are rehabilitation of one campground, all visitor related signs, and a visitor trail. With this work accomplished, the Service no longer needs these funds for this purpose and proposes to reduce the base refuge funding by $378,000 in FY 1987.

Distribution of Change by Object Class

The object class detail for the proposed $378,000 decrease is as follows:

	Amount
Transportation of People	-20,000
Transportation of Things	-20,000
Other Services	-170,000
Supplies and Materials	-172,000
	$-378,000

Justification of Program and Performance

Activity: Wildlife Resources
Subactivity: Law Enforcement and Protection

(Dollar amounts in thousands)

		1986 Enacted To Date	Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) from Base
Law Enforcement	($)	[illegible]	[illegible]	[illegible]	[illegible]	0
	(FTE-P)	([illegible])	([illegible])	([illegible])	([illegible])	([illegible])
Total Requirements	($)	[illegible]	[illegible]	[illegible]	[illegible]	0
	(FTE-P)					([illegible])

Gramm-Rudman-Hollings Impact:

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Law Enforcement	[illegible]	-[illegible]	[illegible]

As a result of the $[illegible] thousand P.L. 99-177 reduction, the Fish and Wildlife Service will provide reduced protection to migratory birds, marine mammals, and other species of wildlife. These reductions represent the deletion of [illegible] agent staff years. The Service will respond only to [illegible] violating the highest priorities of species protection. Among the types of activities that will be curtailed will be intelligence gathering and investigations.

Authorizations: 16 U.S.C. 668-668d - Eagle Protection Act, as amended. This Act makes it illegal to import, export, or take bald or golden eagles, or to sell, purchase, or barter their parts, or products made from them, including their nests or eggs.

16 U.S.C. 703-711 - Migratory Bird Treaty Act, as amended. Except as allowed by implementing regulations, this Act makes it unlawful to pursue, hunt, kill, capture, possess, buy, sell, purchase, or barter any migratory bird, including the feathers or other parts, nests, eggs, or migratory bird products.

16 U.S.C. 718 - Migratory Bird Hunting and Conservation Stamp Act. Commonly referred to as the "Duck Stamp Act," this Act requires waterfowl hunters, 16 years of age or older, to purchase and possess a valid Federal waterfowl hunting stamp prior to taking migratory waterfowl.

18 U.S.C. 42; 16 U.S.C. 3371-3378 - The Lacey Act Amendment of 1981. This Act provided authority to the Secretary of the Interior to designate injurious wildlife and ensure humane treatment for wildlife shipped to the U.S. Further, it prohibited the importation, exportation, transportation, sale, or purchase of wildlife taken or possessed in violation of State, Federal, Indian tribal, and foreign laws. The Amendments strengthen and improve the enforcement of Federal wildlife laws and improve Federal assistance to the States and foreign governments in the enforcement of their wildlife laws. Additionally, the Act provided an important tool in the effort to gain control of the smuggling and trade in illegally taken fish and wildlife.

16 U.S.C. 1361-1407 - Marine Mammal Protection Act of 1972, amended in 1981. This Act established a moratorium on the taking and importation of marine mammals, including parts and products, and defined a Federal responsibility for conservation of marine mammals, with management authority vested in the Department of the Interior for sea otter, walrus, polar bear, dugong, and manatee.

16 U.S.C. 742j-1 - The Airborne Hunting Act. Section 13 of the Fish and Wildlife Act of 1956 is commonly referred to as the Airborne Hunting Act or Shooting From Aircraft Act and prohibited taking or harassing wildlife from aircraft, except when protecting wildlife, livestock, and human health or safety as authorized by a Federal- or State-issued license or permit.

16 U.S.C. 668dd-668ee - National Wildlife Refuge System Administration Act of 1966, as amended. This Act constituted an "Organic Act" for the National Wildlife Refuge System by providing guidelines and directives for administration and management of all areas in the system including "wildlife refuges, areas for the protection and conservation of fish and wildlife that are threatened with extinction, wildlife ranges, game ranges, wildlife management areas, or waterfowl production areas."

Objectives:

1. To enforce the legislation cited above;

2. To enhance legitimate use and enjoyment of migratory birds and other wildlife;

3. To inform citizens of various laws and regulations;

4. To protect domestic and foreign wildlife species that enter into interstate and international commerce that are protected by treaty or otherwise under Federal jurisdiction and to issue permits when appropriate; and,

5. To uncover major commercial activity involving illegal trade of protected wildlife and wildlife products.

Base Program: The Service's law enforcement function is organized into seven Law Enforcement Districts, each managed by a Special Agent-in-Charge who reports to the Regional Director, and a Washington Office Law Enforcement staff which reports to the Wildlife Resources Program Manager. Workload activities of the Service's law enforcement program are reflected by investigative case disposition statistics and case status statistics in the following tables:

Case Disposition

Fiscal Year	Criminal Actions				Civil Actions			Returns to the Government[1] ($000)
	Convictions	Conviction Rate(%)	Fines ($000)	Jail (Years)	# of Penalties Assessed	Penalties ($000)	Forfeitures ($000)	
1982	9,656	94	1,120.3	151	2,665	80.2	892.9	2,093.4
1983	7,052	94	899.5	106	1,312	106.8	404.5	1,410.8
1984	7,858	96	1,090.3	94	792	224.0	933.0	2,247.3
1985	7,647	93	1,469.6	206	385	156.6	672.4	2,298.6

[1] Includes criminal fines and civil penalties assessed as well as the value of property forfeited to the Government.

Case Status

Fiscal Year	Pending at start of FY	Opened during FY	Closed during FY	Pending at end of FY
1982	7,520	18,591	19,375	6,736
1983	6,736	15,230	15,275	6,325
1984	6,325	11,319	13,738	3,906
1985	3,906	13,363	11,303	5,966
1986	5,966	10,750	11,066	5,650
1987	5,650	10,500	10,750	5,400

Law Enforcement is funded through three Programs: Wildlife Resources, Endangered Species, and Fishery Resources. The Wildlife Resources Program provides most of the program management for law enforcement activities, and therefore, a detailed description of the base program appears under this section. Additional specific information appears in the Endangered Species and Fishery Resources Program sections.

Funding Analysis: Funds available for Law Enforcement and a distribution of the FY 1987 estimate are shown below. It is estimated that a total of $2,000,000 will be spent during FY 1987 in support of activities undertaken to enforce the Lacey Act as amended.

($000)

Program Source	FY 1987 Base	FY 1987 Estimate	Dec (-) Inc (+) From Base
Wildlife Resources	9,708	9,708	0
Fisheries Resources	2,075	2,075	0
Endangered Species	8,433	7,240	-1,193
TOTAL	20,216	19,023	-1,193

Major Components	1987 Estimate	Number of Agent Work-Years
(1) Field Investigations	12,988	173
(2) Special Operations	765	9
(3) Special Agent Trainees	445	10
(4) Wildlife Inspections	2,019	(56)
(5) Washington Office Support	2,002	10
Law Enforcement Subtotal	18,219	202
(6) Wildlife Permit Office	804	0
TOTAL	19,023	202

Only agent work-years, as defined in the "Special Agent Funding and Costs" report provided to the Senate on May 17, 1983, are shown under number of agent work-years. Total staff costs, including clerical and other support staff, comprising the remainder of the 368 FTEs assigned to Law Enforcement and Protection are included in the per agent costs by type of duty presented below.

Major Components: Law enforcement activities support the national interest and objectives of the Service concerning the sound management of the Nation's wildlife resources. The law enforcement program has five major components that provide the Service with a uniquely effective capability to maintain its Federal leadership in the conservation of wildlife. A description of each component follows:

(1) Field Investigations. Special Agents enforce all Federal wildlife protection laws by conducting investigations and apprehending individuals charged with violations throughout the United States, including Guam, Puerto Rico, and the Virgin Islands. Having begun with responsibilities under the Lacey Act of 1900 that originally consisted of prohibiting the interstate commerce of illegally taken game and preventing the importation of injurious wildlife into the United States, agents now help conserve eagles and other migratory birds, endangered species, marine mammals, other species protected by international treaty or by individual foreign countries, and any wildlife hunted or harassed from aircraft. During the past 10 years, the complexity of investigations has changed from primarily petty offense violations to felony violations involving illegal trafficking in wildlife, both within the United States and in foreign countries.

(2) Special Operations. The Special Operations Branch is composed of 9 Special Agents who are assigned full-time undercover duties and report to the Washington Office. They employ highly sophisticated and innovative investigative techniques in the fight against large-scale illegal commercialization of wildlife. Experience has shown that one of the most effective techniques is through undercover operations; i.e., investigations which are furthered through information developed by agents and/or informants who infiltrate wildlife trafficking organizations or set up store-front operations. Such investigations are expensive, time-consuming, and dangerous; however, undercover operations have been quite successful in apprehending and prosecuting major violators and, at least temporarily, ending their exploitation of wildlife resources and providing some deterrence to such activities in the future.

(3) Special Agent Trainees. In 1976 the Service inaugurated a procedure for the selection and training of Special Agents that emphasized nationwide recruiting and the selection of the best qualified candidates without regard to geographic location. All new agents are sent to the Federal Law Enforcement Training Center at Glynco, Georgia, for initial basic training and then are stationed at various field locations for closely supervised on-the-job training. After 12 to 18 months they are absorbed into the field investigations program, and additional new agents are hired to replace them as trainees. In FY 1987, it is estimated there will be 10 agent work-years expended in this program.

(4) Wildlife Inspections. To monitor the legal trade and interdict illegal importations and exportations of federally protected fish and wildlife species, the Service employs 56 uniformed Wildlife Inspectors who work side-by-side with Customs and Agricultural Inspectors to provide expertise in wildlife law and identification. Wildlife Inspectors check the legality of the various importation permits and documents and conduct physical inspections on a random basis to interdict illegal importations. For a discussion of the costs of the Wildlife Inspection Program, see the Endangered Species Justification for Law Enforcement and Protection.

(5) Washington Office Support. The Washington Office of Law Enforcement provides overall direction, policy development, direct support to the field, coordinates interdistrict investigations, monitors investigations having national significance, conducts selected highly sensitive investigations and intelligence analysis, maintains liaison with appropriate law enforcement agencies at the Federal level, conducts all foreign investigations, and drafts and reviews Federal regulations. The Washington Office also provides direct investigative support to the field through the operation of a forensic science capability and by providing highly specialized electronic surveillance equipment and expertise. In addition, the Washington Office provides training for all new agents, in-service annual training for all agents and specialized training for other Service and State fish and game agency personnel at the Federal Law Enforcement Training Center at Glynco, Georgia, and administers the Law Enforcement Management Information System (LEMIS). LEMIS is a computerized investigative records data base, which assists field agents and supervisors in managing their caseloads and providing for sophisticated intelligence analysis.

(6) Wildlife Permit Office. The Wildlife Permit Office component includes expenses incurred through the issuance of complex or otherwise unusual Federal Wildlife permits as provided for by statute. Although almost 80% of the wildlife permits handled by the Service are issued in the field by law enforcement Special Agents, a significant number require the special attention of the Wildlife Permit Office; e.g., for compliance with the Convention on International Trade in Endangered Species of Fauna and Flora. For a more detailed discussion of the costs of the wildlife permit office, see the Endangered Species Justification for Law Enforcement and Protection.

Major Wildlife Law Violations: The Service considers the most serious violations to be large-scale commercialization of domestic wildlife. Species affected by this activity include migratory waterfowl, migratory non-game birds, walrus, reptiles and their parts. Additional species, for which the Service shares protection responsibility with the States when interstate commerce of illegally taken wildlife is involved, include plants, fish, deer, bear, and other big game animals.

Another serious category of wildlife law violations is the illegal importation of wildlife into the United States for commercial purposes. Frequently used techniques include false documents, concealment and other forms of smuggling, failure to declare wildlife, as well as false declarations, and various forms of Customs duty evasion. Among the many items subject to this activity are live parrots, crocodilian and other reptile leather, and the fur of various mammals.

The illegal take of migratory birds, especially ducks and geese, and the illegal use of aircraft to take wildlife are other major categories of wildlife law violations requiring Service law enforcement attention. These violations are hard to detect and take many hours of investigative activity.

Public Awareness: The Service publicizes the results of major law enforcement investigations in the belief that such publicity will deter wildlife crime. Although it is difficult to measure the effects of such programs, they are standard features of virtually all law enforcement programs at Federal, State, and local levels. Among the many techniques used are airport displays, donation of seized property for educational purposes to various institutions, brochures, fact sheets, and responses to inquiries from the media.

Special public awareness efforts, such as meetings, lectures and speeches, and direct mailings, are made to reach specific groups including customs brokers, taxidermists, hunters, travel agencies, and conservation organizations. These efforts are believed effective in reducing both the intentional and accidental illegal take of wildlife.

Program Trends

In FY 1987 and FY 1988, Service law enforcement activities are expected to continue to focus on major illegal commercialization of wildlife. Further, the Service intends to rely on undercover operations as an effective investigative tool for combating such crime.

Justification of Program and Performance

Activity: Wildlife Resources
Subactivity: Population Management

(Dollar amounts in thousands)

		1986 Enacted To Date	Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) or Dec.(-) From Base
Wildlife Management	($)	7,346	7,030	7,289	9,180	+1,891
	(FTE-T)	(149)	(149)	(149)	(149)	(0)
Total Requirements	($)	7,346	7,030	7,289	9,180	+1,891
	(FTE-T)	(149)	(149)	(149)	(149)	(0)

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Wildlife Management	7,346	-316	7,030

As a result of the $316 thousand P.L. 99-177 reduction, the Fish and Wildlife Service will reduce the number of surveys such as the colonial bird registry, raptor survey, white-winged dove survey, and eastern Canada black duck survey. Some analyses on the stabilized regulations will be eliminated and travel will be restricted, particularly regarding Flyway Representatives.

Assistance provided to the USDA and the agricultural industry in developing the means to incorporate wildlife enhancement into agricultural programs and practices will be deferred. Work being accomplished on marine mammals will also be reduced.

Authorization: 16 U.S.C. 715-715d, 715e, 715f-715r - Migratory Bird Conservation Act, as amended. The Act authorized the Secretary of the Interior to conduct investigations related to migratory birds.

16 U.S.C. 703-711 - Migratory Bird Treaty Act of 1918, as amended. The Act implemented treaties with Canada, Mexico, Japan, and the Soviet Union. The Act established the Federal responsibility for protection and management of migratory game and nongame birds, including the establishment of season length, bag limits and other hunting regulations, and the issuance of permits to band, possess or otherwise make special use of migratory birds.

16 U.S.C. 661-667 - Fish and Wildlife Coordination Act, as amended. The Act authorized the Secretary of the Interior to assist Federal, State and private organizations in the management of wildlife and their habitats; to conduct wildlife surveys and investigations; and for other related purposes.

16 U.S.C. 1531-1543 - Endangered Species Act of 1973, as amended. The Act implemented the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (56 Stat. 1354, T.S. 982) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) (T.I.A.S. 8249).

16 U.S.C 1361, 1362, 1372-1384, 1401-1407 - Marine Mammal Protection Act of 1972, as amended. The Act established Federal jurisdiction over all marine mammals. The Department of the Interior has management responsibility for the sea otter, walrus, polar bear, dugong, and manatee.

P.L. 99-198; - Food Security Act of 1985 (1985 Farm Bill). The Act authorized the Secretary of Agriculture to conduct various agricultural programs. The 1985 Farm Bill has provisions that can assist in fish and wildlife conservation, which include Swampbuster, Sodbuster, Conservation Reserve, Farm Debt Restructure and Conservation Easement Set-aside.

Wildlife Management

Objectives:

1. To forecast fall flights of waterfowl as an aid in establishing annual hunting regulations.

2. To develop estimates of woodcock and mourning dove breeding population status as an aid in establishing annual hunting regulations.

3. To provide estimates of the size, species composition, age and sex ratios, location and chronology of annual duck and goose harvests nationwide.

4. To cooperate with the States and the Canadian and Mexican governments in establishing annual hunting regulations and enhancing the conservation of waterfowl and other migratory game and nongame birds.

5. To provide technical information and advice to other nations, the States and private conservation organizations on the conservation and management of game and nongame migratory birds.

6. To recommend strategies and priorities for protecting wetlands.

7. To assist the USDA and the agricultural industry in developing the means to incorporate wildlife enhancement into agricultural programs and practices.

8. To conserve and manage non-listed marine mammal species, prevent them from becoming depleted, threatened, or endangered; maintain the health and stability of the marine ecosystem; provide for beneficial human use; participate in international efforts to conserve marine mammals; and, ultimately, to encourage the States to assume management.

Base Program: The major effort under Wildlife Management is the management of migratory bird populations to provide the greatest benefit to people, including hunters, bird watchers and others who enjoy birds as part of their lives. The Service coordinates and conducts annual survey and banding programs that provide information essential to the development and implementation of management programs. This information is needed to establish hunting seasons that permit optimum migratory game bird harvest levels and to avoid actions that might cause long-term population declines of both game and nongame species.

Both the Service and the States participate in the collection and analysis of biological data, both maintain habitat, and both contribute to the establishment of hunting regulations. This sharing of effort and responsibility is essential to the management of waterfowl and to the success of cooperative efforts with other nations.

Because of the overlap between the Migratory Bird Treaty Act of 1918, as amended, and the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (Western Convention), all migratory bird management activities relate to the Western Convention. Most of the activities are unilateral, but the Service also undertakes bilateral and multilateral efforts with other Western Convention nations. For example, the Service and Mexico have developed several cooperative migratory game bird management programs. The Service has 1) advised Brazil and Mexico on setting up bird banding systems, 2) helped Mexico develop white-winged dove survey techniques, and 3) advised Mexico and the Central American nations on white-winged dove management and harvest strategies. The Service cooperates with Mexican, Latin American and Caribbean wildlife professionals in 1) training programs 2) developing and exchanging technical information, and 3) selected bilateral research and management of migratory birds, other wildlife and wildlands. In compliance with a Congressional directive the Service will expend about $478,000 in FY 1986 Resource Management base funding for cooperative Western Convention efforts.

Under common law, wildlife species are the property and responsibility of the government (Federal & States) until reduced to private ownership by some lawful manner. Their conservation management and control are therefore an inherent government responsibility. A portion of this responsibility is designing, developing, and coordinating programs for native Americans, the military services, Federal, State and local governments, private industry, and foreign governments. The purpose of wildlife assistance is to influence land, water and resource policy and use, and to assure the continuing welfare of wildlife and wildlife habitats. The Service will expend about

$250,000 in FY 1986 in wildlife assistance to coordinate marine mammal activities within the Service and with State and other Federal agencies. These activities include preparing or reviewing marine mammal management plans, implementing the polar bear treaty and high seas marine mammal incidental take regulations, and conducting population survey work. Marine mammal management activities would also include processing State requests for transferring management from the Service to the States under regulations published pursuant to the 1981 Amendment to the Marine Mammal Protection Act, and monitoring any such State program. To date no State has requested return of management.

Wildlife Management Workload Factors

		Estimate	
Survey	1985	1986	1987
Waterfowl breeding ground survey (aircraft hours)	1,400	1,400	1,700
Periodic waterfowl surveys (aircraft hours)	750	750	1,050
Midwinter waterfowl survey			
(aircraft hours)	1,100	1,100	1,250
(auto miles)	46,000	46,000	51,000
Woodcock singing-ground survey (routes)	900	900	900
Harvest survey			
Duck wings collected	72,000	72,000	72,000
Goose tail fans collected	8,000	8,000	8,000
Woodcock wings received	17,000	17,000	17,000

		Estimate	
Banding	1985	1986	1987
Bands issued	2,000,000	2,000,000	2,000,000
Bands recovered	69,000	71,000	70,000
Other			
Management regulations prepared/reviewed	4	4	4
Research, public display, and incidental take permits reviewed	20	20	20
Environmental assessments/impact statements prepared/reviewed	4	4	4

FY 1985 Expected Accomplishments: National Resource Plans for 53 migratory bird species/populations were completed and distributed.

Extensive field work to provide data for evaluating stabilized duck hunting regulations in the U.S. and Canada was completed. A schedule for the analysis and reporting of results was prepared.

Harvest restrictions for black ducks in the Atlantic and Mississippi Flyways, and 3 species of geese nesting in Alaska, were continued. Discussions with representatives of native groups in Alaska and other interested parties in the Pacific Flyway resulted in agreement on a management plan to restore those Alaska goose populations that have been seriously reduced.

Regulations to reduce the exposure of bald eagles and waterfowl to lead shot poisoning were proposed. Since by law the Service must obtain State approval for Federal regulations requiring non-toxic shot, and since a number of States did not approve proposed regulations, implementation was more limited than desired. The Service continued to seek the support of Flyway Councils, States, and other concerned parties in this matter. The Service has worked closely with the four Flyway Councils to propose a standard set of guidelines that can be used throughout each flyway in identifying where lead poisoning of waterfowl is a serious problem.

Work was initiated with Canadian wildlife authorities on a North American Waterfowl Management Plan. The plan will establish population objectives and overall management strategies.

The Service proposed revised guidelines to permit Indians, with recognized reserved hunting rights, more flexibility in establishment of migratory bird hunting regulations.

Finally, duck harvest strategies were reviewed and modified pending completion of the stabilized hunting regulations study.

FY 1986 and 1987 Emphasis: The Service will slightly increase its migratory bird survey and banding activities over FY 1985, except for banding of prairie ducks which will be somewhat reduced due to completion of the field work related to the evaluation of stabilized duck hunting regulations. Cooperative work will continue with the States, Canada, and Mexico to implement species and population management plans for selected migratory birds. Attention will continue to be given to cooperating with Canada on black duck management and research to attempt to halt or reverse the declining trend in this species. A draft North American Waterfowl Management plan will be made available for public review and comment in FY 1986.

In order to lessen the impact of lead poisoning on waterfowl, the Service will continue to cooperate with States and others. However, in compliance with P.L. 98-473, Sec. 305, the Service is not implementing or enforcing any rules or regulations requiring the use of steel shot in connection with the hunting of waterfowl in any State unless the appropriate State regulatory authority approves such implementation and enforcement. However, the Service is considering leaving certain areas closed to waterfowl hunting in the 1986-87 hunting season if States continue to reject the use of non-toxic shot. Areas being considered include four national wildlife refuges (Stillwater, Nevada; Benton Lake, Montana; Tule Lake and Lower Klamath, California) where studies have indicated waterfowl lead poisoning problems, and portions of five States (California, Oregon, Illinois, Missouri, and Oklahoma) where bald eagles concentrate and eat crippled and sick waterfowl that contain lead shot.

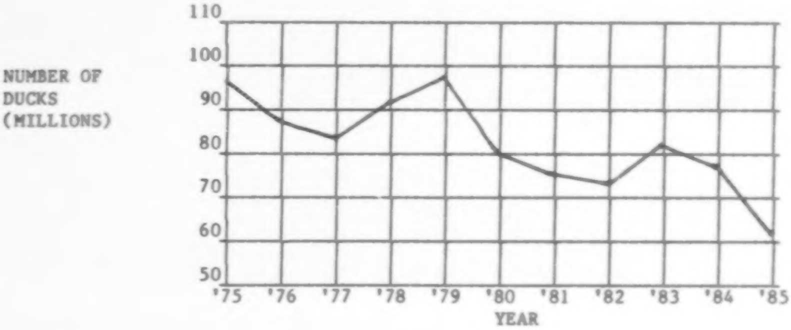
Increases/Decreases from FY 1987 Base:

	FY 1987 Base	FY 1987 Estimate	Increase
Wildlife Management			
($)	7,289	9,180	+1,891
(FTE-T)	(148)	(148)	(0)

Waterfowl Production and Habitat Management (+2,000/0)

In FY 1985, the Service estimated the waterfowl breeding population to be the lowest ever recorded in the 31 years of surveys. The mallard breeding population reached an all-time low of 5.5 million while the northern pintail population fell below 3 million for the first time. Populations of other important species such as shoveler, gadwall, scaup, canvasback, redhead, and wigeon also showed marked declines. Only the green-winged teal increased slightly over last year. The overall waterfowl breeding population has been estimated to be just under 31 million, compared to 38 million in 1984.

The above breeding population estimate plus other factors, primarily breeding habitat conditions, are used to forcast the fall flight population. The estimated FY 1985 fall flight was 62 million birds, down 22% from 1984 and the lowest ever projected by the Service. This extremely low population number demands caution; therefore, the Service has taken steps to reduce the immediate impact on this low population by proposing reduced season lengths and bag limits. The following chart shows the fall flight forecast in the United States for the past ten years.



A number of factors, besides hunting, are likely responsible for the declines we are experiencing. For example, the Service is concerned about the impact of agricultural practices on the duck's ability to rebound from recent drought conditions. When wetlands are dry, farmers are more likely to convert them to cultivation. Wetland loss, combined with the loss of nesting cover near wetlands, has reduced the quantity and quality of habitat ducks need to produce young. Therefore, the Service proposes to enhance waterfowl production, primarily mallards, black ducks, pintails, redheads and canvasbacks, by providing for leases on private land with annual payments for restoration of drained wetlands, development of wetlands, and establishing nesting cover both on and off Service land. This initiative also provides for the installation and maintenance of artificial nest structures. Most of this effort will be accomplished in the glaciated pothole region of the north central states. In addition, habitat protection will be accomplished by encouraging biological farming practices and providing technical assistance to landowners. The Service will also use this initiative to determine the various types of mortality that impact Canada geese in the Mississippi flyway and conduct surveys, collect production data, and determine the effects of regulation changes and management initiatives on production and harvest. A breakdown of work activities and funding is as follows:

Activity	($000/FTE)
°Extension effort for farm wildlife habitat	200/0
°Increase waterfowl production on and off Service lands	700/0
°Management/Protection Waterfowl Habitat	850/0
°Canada Goose Management	250/0

Object Classification Description

The object classification description for the proposed increase is as follows:

Travel and Transportation of Persons	90,000
Travel and Transportation of Things	45,000
Printing and Reproduction	80,000
Communications and Utilities	50,000
Other Services (including contracts)	1,085,000
Supplies and materials	300,000
Equipment (vehicles, traps, nets, etc.)	350,000
	2,000,000

Western Hemisphere Convention (-109/0)

	FY 1987 Base	FY 1987 Estimate	Decrease
Western Hemisphere Convention($)	$499,000	390,000	-109,000

Section 8A(e) of the 1982 amendments to the Endangered Species Act requires the Service to take steps to implement the provisions of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere (known as the Western Convention).

The Service received an increase of $109,000 in FY 1986 to expand on-going programs with Western Convention party nations, particularly those activities dealing with migratory birds and training in wildlife management. The Service proposes discontinuance of the increase. The Service will continue to fulfill its current responsibilities under the Western Convention through present activities, including close cooperation and communication with parties on implementation, cooperative training workshops, permit procedures on listed species, and identification of actual and potential problems with traded species. Therefore the Service's current budget request provides sufficient resources to support Convention activities in FY 1987.

Object Classification Description

The object classification description for the proposed decrease is as follows:

Travel and Transportation of Persons	17,000
Travel and Transportation of Things	1,000
Printing and Reproduction	4,000
Communications and Utilities	4,000
Other Services (including contracts)	80,000
Supplies and materials	2,000
	108,000

Justification of Program and Performance

Activity: Wildlife Resources
Subactivity: Research and Development

(Dollar amounts in thousands)

		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) or Dec. (-) From Base
Wildlife Research	($)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	(FTE/P)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Maintenance	($)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	(FTE/P)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Requirements	($)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	(FTE/P)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Gramm-Rudman-Hollings Impact

		1986 Enacted To Date	G-R-H Sequester Reduction	1986 Adjusted Approp.
Wildlife Research		[illegible]	[illegible]	[illegible]
Maintenance		[illegible]	[illegible]	[illegible]
Total	($)	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

and the termination of some directed research on national wildlife refuges. At the Alaska Office of Fish and Wildlife Research activities relating to arctic nesting geese and marine mammals will be impacted; for example the number of goose research field camps will be reduced. Studies to evaluate field sampling techniques for walrus will be deferred. Some waterfowl studies under the direction of the Northern Prairie Wildlife Research Center will be deferred in both California and North Dakota to achieve a share of this reduction. Personnel impacts will be minimized as individual researchers will be reassigned to participate in disease-contaminant interaction studies. At Patuxent Wildlife Research Center (PWRC) the reduction will be achieved by deferring personnel actions, trimming administrative support, and by early completion of selected work units. The scope of ongoing nongame research activities at PWRC will also be reduced.

Authorization: 16 U.S.C. 742a-742j, The Fish and Wildlife Act of 1956, directed a program of continuing research, extension and information services on fish and wildlife matters at national as well as international levels.

16 U.S.C. 715-715d, Migratory Bird Conservation Act, authorized the Secretary of the Interior to conduct investigations and publish documents related to North American birds.

16 U.S.C. 1361, 1381, The Marine Mammal Protection Act of 1972, authorized research on marine mammals.

7 U.S.C. 426-426b, Animal Damage Control Act of March 2, 1931, as amended, authorized the Secretary to conduct research on man/wildlife conflicts.

16 U.S.C. 703-711, Migratory Bird Treaty Act of 1918, as amended, gave the Secretary of the Interior primary research and management authority for migratory birds.

Wildlife Research

Objectives:

1. To conduct research on migratory birds which will provide techniques for preserving and managing habitat; population information needed for development of sound harvest regulations; biological and ecological information necessary for proper management of nongame birds; information and field responses for reducing non-hunting mortality; and methods for assessing the impact of different types of land use and development on avian populations.

2. To develop the understanding of functional relationships of wildlife species and their ecosystems necessary to properly manage resources. Wildlife research is conducted at the Patuxent Wildlife Research Center, Northern Prairie Wildlife Research Center, the National Wildlife Health Laboratory, Alaska Office of Fish and Wildlife Research, and their field stations.

Base Program: Wildlife research provides the Service with basic biological information about species numbers, population dynamics, ecological relationships, and habitat requirements. This information allows for the establishment of prudent hunting regulations, description of essential habitat, identification of populations in danger of becoming threatened, development of optimum land use management programs, reduction of non-hunting mortality, assessment of environmental impacts, adequate mitigation of habitat losses, and increased opportunities to utilize and enjoy the resource. Research is conducted by experienced scientists using current techniques and technology, including computers to assist in data analysis and model development and implementation.

Major wildlife research workload factors are shown in the following table:

	FY 1985	FY 1986	FY 1987
Waterfowl Population Status Studies	28	28	29
Waterfowl Ecology and Habitat Studies	24	25	25
Wildlife Health Studies and Services	10	10	15
Nongame Bird and Public Lands Studies	26	20	18
Wildlife Ecology on Public Lands Studies	20	16	10
Marine Mammals Research Studies	5	5	5
Migratory Shore and Upland Bird Studies	2	1	1

Wildlife research is conducted in the following major areas ($000/FTE):

Waterfowl Population Status ($1,862/28): Studies on population status include development of improved census techniques, factors affecting productivity and mortality, and the effects of environmental factors and hunting regulations on population status. Most of this work is done at the Patuxent Wildlife Research Center at Laurel, Maryland and at the Northern Prairie Wildlife Research Center at Jamestown, North Dakota. Additional research, on arctic nesting geese, is being conducted by the Alaska Office of Fish and Wildlife Research. A small amount of population research on migratory shore and upland game birds is included in this area.

Waterfowl Ecology, Habitat Requirements, and Effects of Various Habitat Manipulations ($1,826/36): The focus of this research is to increase productivity on national wildlife refuges and other waterfowl habitats. Major studies are being conducted on prairie breeding areas including the development of a predictive model to assess various waterfowl management strategies. Studies are also continuing on canvasbacks in wintering areas along the East coast, and migrational staging areas along the Upper Mississippi River, and waterfowl wintering concentrations in the California Central Valley and in Mississippi Delta bottomland hardwoods. These studies are conducted by the Patuxent Wildlife Research Center for the eastern United States and by the Northern Prairie Wildlife Research Center at Jamestown, North Dakota, for the central and western part of the nation.

Wildlife Health ($2,565/30): The effort to reduce losses of migratory birds to disease involves prevention, diagnosis, control, and research. The response to disease outbreaks involves prompt field investigation, rapid laboratory diagnosis and data analysis, and initiation of proper control measures to prevent the spread of disease. In addition, field investigation training is provided to refuge biologists, and management recommendations to reduce the likelihood of disease outbreaks are made to refuge managers.

Resource Health Team members at the National Wildlife Health Lab provided on-site field assistance at eight locations in five states during FY 1985. Over 750 diagnostic cases were received and processed at the laboratory. In addition, over 9,000 tissue samples or carcasses were analyzed as part of the Service's continuing lead monitoring program on Federal and State refuges. In FY 1987, the Service will initiate a new study to investigate the interaction of avian disease and environmental contaminants.

Nongame Species ($1,144/44): Primary emphasis is directed at identifying species likely to become threatened. These studies involve monitoring population trends, improving survey methods, and identifying key habitats. Studies include determination of ecological requirements for colonial nesting waterbirds, raptors, and marine birds, and to evaluate effects of coastal and off-shore development.

In FY 1985 researchers completed studies to identify migratory routes and important habitats of shorebirds in the western hemisphere. Studies were continued to evaluate effects of forest fragmentation, to evaluate breeding bird survey techniques, and to determine the distribution and status of Caribbean terns.

Wildlife Ecology on Public Lands ($682/29): Research emphasis is on studies which will provide knowledge and techniques to permit optimum management of public lands, especially national wildlife refuges, for the benefit of wildlife. Among current studies are investigations of migratory bird use of western riparian habitats. Research is also being conducted on the movements and ecology of the Porcupine caribou herd on the Arctic National Wildlife Refuge to assess the potential impacts of petroleum development on this herd.

Studies are continuing on the status and ecology of the brown bears of Kodiak Island, Alaska, to make recommendations on the interrelationships between bears, people, and man-made structures. Also in FY 1985, Service personnel continued their participation in the Forest Service's Old-Growth Program and on studies of the significance of riparian vegetation and grazing to nongame bird communities on national wildlife refuges.

Marine Mammals ($1,367/5): Studies address near-shore ecosystems as they affect population status of, and management options for, non-endangered marine mammals. The resulting information will help reveal those segments of the life-cycle to which management actions could be applied most effectively. These results could affect decisions related to harvest and protection for specific populations. Non-endangered marine mammals under study include walrus, polar bear, and sea otter in Alaska.

The Service is evaluating distribution and total numbers of walrus using current censusing techniques in order to make management decisions. Other research involving sea otters will be to evaluate their impact on the fisheries industry, including shellfish, in localized areas of Coastal Alaska. These efforts will be reduced during FY 1987 and increased efforts will be undertaken by Wildlife Resources and Endangered Species to document growth, behavior, reproductive characteristics, and movements of sea otters subsequent to reintroduction into historic habitats on the west coast.

Studies of polar bears have centered on mortality, recruitment, and habitat ecology. In FY 1985, major new information on denning sites of polar bears was obtained during the winter field season. Significant numbers of bears were found denning on the pack ice rather than on land as had been thought to be the case.

Increases/Decreases from FY 1987 Base:

	FY 1987 Base	FY 1987 Estimate	Increase
Wildlife Research			
($)	9,342	11,076	+1,734
(FTE-T)	(172)	(172)	(0)

Description of Increase/Decreases from FY 1987 Base:

FY 1987 Increases/Decreases	FY 1987 Base	FY 1987 Estimate	Change
Mortality Factors/ Population Status	1,854	4,905	+3,051
Polar Bear	770	473	-297
Alternatives to Steel Shot	596	0	-596
SE Cooperative Wildlife Disease Study	225	0	-225
Walrus	199	0	-199
TOTAL	$ 3,644	5,378	+1,734

Mortality Factors and Population Status (+$3,051/0)

This proposal is complementary to the Service's Waterfowl Production and Habitat Management proposal in the Population Management Subactivity. As opposed to operational activities, this proposal focuses on research activities necessary to alleviate the downward trend of waterfowl populations in the United States. The Service will use this proposed increase to develop more effective management strategies and techniques and to answer critical questions concerning factors affecting high priority species, especially waterfowl. Some species, such as canvasbacks, whose breeding population estimate is the lowest since 1962, are failing to respond to such management practices as habitat manipulation.

Several studies are included to determine non-hunting mortality, i.e. predation, disease, loss of habitat, etc., and quantify such data by sex and age, magnitude and time-of-year. One such study, the Small Unit Management project will determine the magnitude of duck production that can be attained through the use of specific management techniques, the population density that will result from increased production, and the biological factors that will ultimately limit the size of the breeding population.

A key part of this proposal is improved capacity to process large amounts of data generated by extensive and diverse monitoring activities throughout the continent. This proposal will also provide information necessary to either develop new and/or improve reliability and sensitivity of existing methods for estimating waterfowl breeding populations, fall flights and harvest. Increased data processing capability applied to these extensive monitoring efforts will allow development of more sophisticated population models. Population models will be constructed and validated to investigate and predict the interrelationships of the many variables affecting waterfowl populations. The models will be used to evaluate potential management techniques in order to improve waterfowl management strategies. The results of these data processing and population modeling efforts will fill vital gaps in strategies formulated to stop population declines and restore population levels to more desirable levels. This proposal will also enable the Service to centralize and enhance its ADP in-house capability, expand the use of ADP technology in many areas, and enable the Service to implement networking arrangements among the regional and Washington Offices, and perhaps larger field stations.

Activity	($000/FTE)
Non-hunting Mortality of Waterfowl	1,400/0
Improve Methods for Estimating Waterfowl Populations	600/0
Waterfowl Population Models and Data Analysis	1,051/0
	3,051/0

Object Classification Description

The object classification description for the proposed increase is as follows:

Travel and Transportation of Persons	155,500
Travel and Transportation of Things	64,100
Printing and Reproduction	155,500
Communications, and Utilities	95,100
Other Services (including contracts to Universities)	1,329,100
Supplies and Materials	550,000
Equipment (Vehicles, traps, nets, etc.)	701,700
	3,051,000

Polar Bear Population Estimates (-$297/0)

Procedures for monitoring populations, recruitment, mortality, and the effects of harvest on polar bears have been improved with recent research efforts. The Service has begun to define population boundaries and determine seasonal distribution and habitat requirements.

The State of Alaska is not going to assume management responsibility for polar bears. However, current efforts to collect necessary data will be sustained in order to make proper management decisions on regulations and to maintain an optimum sustainable population as mandated by the Marine Mammal Protection Act. The Service can continue to make progress towards these goals with this decrease.

Accelerated Research on Alternatives to Steel Shot (-$596/0)

Funding was provided in FY 1986 for the Service to initiate accelerated research concerning nontoxic shot substitutes for steel shot and to explore the potential for conducting the research on a cost sharing basis with private industry including ammunition companies. The Service will attempt to comply with this direction but agreements with industry have not been completed and no research has begun. It is unlikely that the Service will be able to gain the level of cost sharing from commerical ammunition manufacturers necessary to initiate this research in FY 1986. In light of current budget constraints the Service proposes this effort as a decrease.

Southeastern Cooperative Wildlife Disease Study (-$225/0)

The Southeastern Cooperative Wildlife Disease Study, headquartered at the University of Georgia in Athens, has been conducting research for several state and federal wildlife management agencies for over 20 years with funds provided, in part, by the Service. The primary beneficiaries of their efforts have been mammals under the jurisdiction of state agencies in the Southeast.

The group has also provided regional assistance to the Service during outbreaks of disease in wildlife under Service jurisdiction. The Service has improved its capabilities to manage wildlife disease outbreaks by developing its own laboratory facilities and providing services similar to those provided by this study, but located throughout the nation. The Service will be able to meet its obligations to wildlife under its jurisdiction by relying on these other facilities. Since the Disease Study is cooperatively funded, it will be able to continue without Service support.

Walrus (-$199/0)

The Service proposes this decrease because current estimates indicate numbers of walrus may exceed optimal sustainable population levels even with a current annual harvest of 15,000 - 20,000, primarily by the U.S.S.R. and Native Alaskans. However, since the harvest has been occurring for a number of years and in light of estimates of satisfactory populations, the Service believes development of improved censusing techniques can be deferred.

Object Classification Description

The object classification description for the proposed decreases is as follows:

Travel and Transportation of Persons	66,000
Travel and Transportation of Things	26,000
Communications, and Utilities	39,000
Other Services	580,000
Supplies and Materials	303,000
Equipment	303,000
	1,317,000

Maintenance

Objectives:

1. To maintain an efficient, effective, and safe work environment.

2. To prevent deterioration of capital investments.

3. To accomplish necessary routine maintenance.

Base Program: The budget request provides funding for three Service-owned wildlife research laboratories and a number of research field stations.

Costs associated with maintaining an office, library, laboratory, and experimental pen space and facilities for research biologists are included under this research maintenance category. These costs include custodial services, cyclical maintenance, minor rehabilitation projects, utilities, and the purchase of grounds maintenance equipment when necessary and cost effective.

FY 1986 and 1987 Emphasis: Wildlife research laboratories will be maintained and rehabilitation will be focused on the most critical projects to preclude recurrence of safety and health hazards and major deterioration of facilities.

Distribution of Wildlife Research Maintenance Estimate by Laboratory
Wildlife Research Maintenance (+300/0)

Increase/Decrease from FY 1987 Base: (Dollar amounts in thousands)

Wildlife Research Maintenance	FY 1987 Base	FY 1987 Estimate	Increase
Wildlife Health Laboratory	472	560	+ 88
Northern Prairie Wildlife Research Center	370	574	+204
Patuxent Wildlife Research Center	842	850	+ 8
($)	1,684	1,984	+300
(FTE-T)	(18)	(18)	(0)

Increases are proposed in Wildlife Research to maintain research activities and facilities at acceptable health and safety levels in FY 1987. Therefore, the service proposes to use the increased funding for the highest priority maintenance and rehabilitation needs. The heating and cooling plant and riprapping of the riverbank at Northern Prairie Wildlife Research Center will maintain a healthy working environment and provide safety for the installation. The Service will reroof flight pens at a field station of Patuxent Wildlife Research Center in Gainesville, Florida. Health and safety at the National Wildlife Health Laboratory will be improved by converting the present waste water system to a sanitary sewer system and by modifying the facility's exhaust stacks which are part of the laboratory's system to burn potential infectious disease agents in its incinerator. A gasoline storage tank will be replaced at Patuxent Wildlife Research Center for safety and maintenance purposes. Although this is a maintenance package, portions of the package will be used for cyclical maintenance while other portions will be used to rehabilitate existing facilities (e.g., riprapping of eroded river banks).

Object Classification Description

The object classification description for the proposed increase is as follows:

Supplies and Materials	$150,000
Equipment	45,000
Other Services	105,000
	$300,000

Justification of Program and Performance

Activity: Wildlife Resources
Subactivity: Alaska Subsistence

(Dollar amounts in thousands)

		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Payments to States	$	974	932	974	0	-974
	(FTE-T)	(0)	(0)	(0)	(0)	(0)
Total Requirements	$	974	932	974	0	-974
	(FTE-T)	(0)	(0)	(0)	(0)	(0)

Gramm-Rudman-Hollings Impact

1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
974	-42	932

As a result of the $42,000 reduction, the Service will provide less assistance to the State of Alaska to carryout its subsistence program.

Payments to States

Authorization: Section 805 of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), P.L. 96-487. The purpose of this section is to provide financial assistance to the State of Alaska in carrying out its subsistence program.

Objective: To address the Secretary's responsibilities pursuant to the provisions of Section 805 of the Alaska National Interest Lands Conservation Act reimbursing the State for reasonable costs relating to its subsistence program.

Decrease From FY 1986 Base (- $974/0 FTE)

The FWS proposes in FY 1987 to eliminate the $974,000 previously provided to the State of Alaska to assist in its implementation of the subsistence program required by Title VIII of the Alaska National Interest Lands Conservation Act of 1980. Previously provided funds have aided the State in initiating and establishing this program. Further Federal funding has been determined to be unnecessary.

Distribution of Change by Object Classification

The object classification of the proposed $974,000 decrease is as follows:

Other Services	$ - 974,000
	$ - 974,000

Justification of Program and Performance

ACTIVITY OVERVIEW: Fishery Resources

Subactivity		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
HATCHERY OPERATIONS AND MAINTENANCE						
Operations	$000	21,766	20,829	21,349	20,274	-1,075
	(FTE-T)	(494)	(494)	(494)	(494)	(0)
Maintenance	$000	4,581	4,384	4,581	3,587	-994
	(FTE-T)	(0)	(0)	(0)	(0)	(0)
Subtotal	$000	26,347	25,213	25,930	23,861	-2,069
	(FTE-T)	(494)	(494)	(494)	(494)	(0)
LOWER SNAKE RIVER COMPENSATION PLAN (Facility Operations and Maintenance)						
Facility O & M	$000	5,631	5,389	5,602	6,411	+809
	(FTE-T)	(14)	(14)	(14)	(14)	(0)
REFUGE OPERATIONS AND MAINTENANCE						
Refuge Fishery Management	$000	2,164	2,071	2,148	2,148	0
	(FTE-T)	(35)	(35)	(35)	(35)	(0)
LAW ENFORCEMENT AND PROTECTION						
Law Enf. and Prot.	$000	2,153	2,060	2,075	2,075	0
	(FTE-T)	(42)	(42)	(42)	(42)	(0)
POPULATION MANAGEMENT						
Technical Assistance	$000	2,149	2,057	2,071	2,285	+214
	(FTE-T)	(55)	(55)	(55)	(55)	(0)
RESEARCH AND DEVELOPMENT						
Research	$000	11,488	10,987	11,177	10,938	-239
	(FTE-T)	(255)	(255)	(255)	(255)	(0)
Maintenance	$000	639	618	639	321	-318
	(FTE-T)	(0)	(0)	(0)	(0)	(0)
Subtotal	$000	12,127	11,605	11,816	11,259	-557
	(FTE-T)	(255)	(255)	(255)	(255)	(0)
ACTIVITY TOTAL	$000	50,571	48,395	49,642	48,039	-1,603
	(FTE-T)	(895)	(895)	(895)	(895)	(0)

Program Overview:

The Administration and the Congress have, over the last 3 years, undertaken a major redirection of the Fishery Resources (FR) Program based on a re-examination of respective Federal and State roles in the management of the Nation's fishery resources. The general intent is that management of natural resources that can best be accomplished at the State level should be assumed by State governments, and that Federal involvement should be directed toward those activities for which there is a clear need for Federal involvement.

Associated with this, the Service developed a comprehensive Statement of Responsibilities and Role to redefine and clarify the role of the Fish and Wildlife Service and the Fishery Resources (FR) Program in management of the Nation's fishery resources. This statement provides direction for the FR Program in support of the Service mission to "provide the Federal leadership to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of people" and the FR Program goal "to promote and enhance conservation of the Nation's freshwater, anadromous, and intercoastal fishery resources for maximum, long-term public benefit."

Four major program responsibilities have been identified which define the role of the Service as a major and integral contributor to the stewardship of the Nation's fishery resources and provide the basis for specific Fishery Resources Program goals and objectives. These responsibilities are not exclusive to the Service and are addressed in close cooperation with the States and other Federal agencies that have a stake in management of the resources. The four major responsibilities are:

- To facilitate restoration of depleted, nationally significant fishery resources;

  Anadromous Pacific (Alaskan and non-Alaskan) salmonids
  Great Lakes lake trout and other fishes
  Anadromous Atlantic salmon
  Anadromous striped bass (Atlantic and Gulf coast)
  Other anadromous fishes
  Migratory intercoastal/estuarine fishes

- To seek and provide for mitigation of fishery resources impaired due to Federal water-related development;

- To assist with management of fishery resources on Federal (primarily Service) and Indian lands;

- To maintain a Federal leadership role in scientifically based management of national fishery resources.

The discharge of these responsibilities is accomplished through various functional activities including biological research, resource assessment, technology development, technical assistance, fish propagation, and law enforcement. In implementing these functional activities, the Service:

- serves as a catalyst in ensuring that resource problems are identified, corrective steps are organized, and agreed-to action is coordinated, and

- taking its own corrective action where statutorily mandated, where doing so is consistent with plans developed jointly by all interested parties, and where its budget and manpower permit.

Budgeting for the Fishery Resources Program (Activity) is accomplished through six budget subactivities that relate to the various functional activities. These budget subactivities are:

Hatchery Operations and Maintenance
Lower Snake River Compensation Plan
Refuge Operations and Maintenance
Law Enforcement and Protection
Population Management
Research and Development

FY 1987 Budget Request Summary:

The FY 1987 request for the Fishery Resources Activity provides for continuation of basic operations at the level provided for in the FY 1986 Appropriation, with adjustments to address the following operational and resource related issues:

- Termination of fish production for stocking of primarily small waters, and reduction of less essential fish hatchery management activities:

  Hatchery Operations and Maintenance: -$1,275,000

- Reduction of hatchery and laboratory maintenance funding to a level adequate for the most essential maintenance:

  Hatchery Operations and Maintenance: -$396,000
  Research and Development: -$118,000

- Operation and maintenance of new mitigation facilities constructed under the Lower Snake River Compensation Plan:

  Lower Snake River Compensation Plan: +$800,000

- Analysis/clarification of FWS responsibilities for implementation of fishery mitigation:

  Population Management: +$214,000

- Implementation of Great Lakes fishery allocation settlement:

  Research and Development: +$110,000

- Reduction of less essential research operations at the Gainesville, Florida, National Fishery Research Laboratory and the Leetown, West Virginia, National Fishery Center:

  Research and Development: -$349,000

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Activity: Fishery Resources
Subactivity: Hatchery Operations and Maintenance

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
Operations	$	21,766	20,829	21,349	20,274	-1,075
	(FTE-T)	(494)	(494)	(494)	(494)	(0)
Maintenance	$	4,581	4,384	4,581	3,587	-994
	(FTE-T)	(0)	(0)	(0)	(0)	(0)
Total Requirements	$	26,347	25,213	25,930	23,861	-2,069
	(FTE-T)	(494)	(494)	(494)	(494)	(0)

Gramm-Rudman-Hollings Impact:

		1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Operations	($000)	21,766	-937	20,829
Maintenance	($000)	4,581	-197	4,384

OPERATIONS (-$937): About $235,000 of the reduction can be achieved by deferring recruitment of less critical personnel vacancies as they occur. The balance of the P.L. 99-177 operations reduction ($702,000) will be secured from non-personnel related operations costs. Effort will be made to accomplish this reduction in a manner that will minimize impairment of production/distribution schedules. This includes postponing purchase of all but absolutely essential equipment, supplies, and materials; eliminating non-essential travel; deferring less critical training; where possible, stocking fish at smaller sizes in order to minimize the need for purchase of fish food, chemicals, and drugs; reducing the number of fish distribution trips; and deferring, to the extent feasible, vehicle and equipment maintenance. Built-in utility costs, especially for pumping/treatment of water supplies, cannot be substantially reduced without affecting quantity or quality of production.

MAINTENANCE (-$197): The P.L. 99-177 reduction applied to the hatchery maintenance base will be achieved by reallocating the total adjusted appropriation to forego lowest priority projects (i.e., defer $197,000 of previously planned projects).

Primary Authorizations: 16 U.S.C. 661-666; Fish and Wildlife Coordination Act - Authorizes assistance to Federal, State, and other agencies in development, protection, rearing, and stocking of fish and wildlife and controlling losses thereof.

16 U.S.C. 742a-742j; Fish and Wildlife Act of 1956 - Directs the Secretary of the Interior to provide continuing research, extension, and information services, and to take any necessary steps to develop, manage, protect, and conserve fishery and wildlife resources, including research.

16 U.S.C. 931-939; Great Lakes Fishery Act of 1956 - Implements the Convention on Great Lakes Fisheries between the United States and Canada.

A number of fish hatcheries are authorized by specific legislative actions not included in this summary.

Objectives:

To produce and distribute fish of the size, species, number, strain, and quality required to meet Federal fishery responsibilities to:

- Facilitate restoration of depleted, nationally significant fishery resources;
- Provide for mitigation of fishery resource impairment due to Federal water-related development;
- Assist with management of fishery resources on Federal (primarily Service) and Indian lands;
- Maintain a Federal leadership role in scientifically based management of national fishery resources.

Base Program:

The operation of the National Fish Hatchery System is directed toward four primary program responsibilities identified under the objectives. Hatchery production requirements are determined annually by management biologists who assess resource management needs on an area-by-area, state-by-state basis. Production goals are coordinated with State, Tribal, and Federal agencies at meetings among the respective fishery resource managers. Most States have fish hatchery facilities, some constructed with Federal funds, and produce most of the fish required for in-state, non-Federal programs. Program facilities and capabilities are utilized in a manner that will best meet existing or emerging needs for Federal/State cooperation in the interest of fishery resources and the public.

The Administration and the Congress have, over the last 5 years, undertaken a continuing redirection of the National Fish Hatchery System. Federal funding for a number of hatchery facilities that contributed primarily to the discharge of State or other Federal agency responsibilities has been terminated. Through FY 1985, FWS funding for 19 Service hatcheries was terminated. Funding of 4 facilities that contribute primarily to Indian tribal fishery programs was assumed by the Bureau of Indian Affairs; operation of 15 hatcheries was assumed by the respective States.

FISH PRODUCTION: A summary of projected production of fingerling and larger fish from the National Fish Hatchery System is as follows:

	1985	1986	1987
Number of hatcheries	73	73	67
Pounds fish distributed (millions)	6.0	5.8	5.5
Number fish distributed (millions)	164	157	151
Technology center investigations	298	286	275
Disease diagnosis cases	296	284	273

Actual distribution by major groupings of fish and fish eggs from the National Fish Hatchery System in FY 1985 was as follows:

Major Program	Number (Eggs & Fish)	Weight (Pounds)	Number of Hatcheries
Pacific Anadromous Salmonids	97,720,000	2,173,000	17 (Incl. Tehama-Colusa Spawning Channel)
Atlantic Anadromous Salmonids	3,112,000	198,000	6
Other Anadromous (Striped Bass)	5,108,000	31,000	22 (Combination hatcheries with programs involving other anadromous and warmwater species.)
Warmwater	154,583,000	223,000	
Non-Anadromous Salmonids	49,245,000	2,963,000	22
Lake Trout	12,430,000	415,000	5
Endangered Species	1,994,000	90,000	1
Total	324,192,000	6,093,000	73

When stocked, these fish contributed to the restoration and maintenance of interstate and international fishery resources throughout the country. The non-budgeted increase of $994,000 in FY 1986 has been annualized in the FY 1987 base to support production of anadromous species, lake trout, and other species. Part of these funds will be used for expanded tagging of indicator stocks pursuant to the U.S./Canada Pacific Salmon Treaty.

MAINTENANCE: The FY 1987 Budget Request for Hatchery O & M includes approximately $3.6 million for cyclical maintenance, rehabilitation, and capital equipment needs throughout the hatchery system. The maintenance funding is managed as a revolving account that is reallocated each year to various hatcheries depending on the project needs in that particular year. These funds are used for:

- Cyclical maintenance: work that recurs at fairly predictable periodic intervals. Examples include: painting, paving, reroofing, periodic servicing of equipment. The primary purpose is to sustain the intended useful life of a facility or equipment item and prevent the need for premature replacement.

- Repair and rehabilitation: work that is not cyclical in nature, but occurs as a result of physical deterioration or functional obsolescence of a structure, building, or other facility. It may include work to modify or improve facilities to enhance their original function or to apply new technological advances.

- Capitalized equipment: replacement or acquisition of major equipment items such as fish distribution tanks, vehicles, automatic feeding equipment, standby generators, specialized scientific or computer equipment.

Base maintenance funds also support necessary engineering services for design, contract management, and other technical services.

FISH TECHNOLOGY CENTERS: Technology centers located in Bozeman, Montana; Lamar, Pennsylvania; San Marcos, Texas; Abernathy, Washington; and Beulah, Wyoming, are operated in support of the National Fish Hatchery System. Activities include nutrition and quality control monitoring for fish feeds to ensure maximum fish survival and minimum cost of feed; disease diagnosis and treatment through laboratory examination of fish from Federal, State, and private installations; improvement of methods of water reuse to increase hatchery operational efficiency; and evaluation of the performance of various strains of hatchery fish under specific management conditions.

Changes For FY 1987

		FY 1987 Base	FY 1987 Estimate	Inc.(+) or Dec.(-)
Operations	$000	21,349	20,274	-1,075
	(FTE-T)	(494)	(494)	(0)
Maintenance	$000	4,581	3,587	-994
	(FTE-T)	(0)	(0)	(0)
Total Requirements	$000	25,930	23,861	-2,069
	(FTE-T)	(494)	(494)	(0)

Termination of Non-essential Hatchery Operations (-$1,075,000/ 0 FTE):

This action will result in savings of $1,075,000 in hatchery operations by eliminating fish production for stocking private waters and closing or transferring to State operation six associated hatcheries, terminating operation of one field station requiring substantial facility rehabilitation, closing aquariums/ visitor centers at six hatcheries, and reducing general program support of interpretation and recreation (I & R) activities for the Fishery Resources Program. A summary list of the facilities affected by this action follows:

State Station	Operations ($000)	I & R ($000)	Action
Alabama			
Carbon Hill NFH	-126		Hatchery transfer or closure.
Arkansas			
Mammoth Spring NFH	-146		Hatchery transfer or closure.
Florida			
Welaka NFH		-15	Aquarium closure.
Georgia			
Warm Springs NFH	-126		Hatchery transfer or closure.
Millen NFH		-15	Aquarium closure.
Kentucky			
Frankfort NFH	-139		Hatchery transfer or closure.
Louisiana			
Natchitoches NFH	-152		Hatchery transfer or closure.
		-15	Aquarium closure.
Mississippi			
Pvt. John Allen NFH	-147		Hatchery transfer or closure.
Meridian NFH		-13	Aquarium closure.
New Mexico			
Dexter NFH		-14	Aquarium closure.
South Carolina			
Bears Bluff Field St.	-85		Station transfer or closure.
South Dakota			
Gavins Point NFH		-46	Aquarium closure.
Washington and Regional Offices	___	-36	Reduce I&R support.
Total	-921	-154	

TRANSFER OR CLOSURE OF SIX NATIONAL FISH HATCHERIES AND ONE FIELD STATION (-$921,000): Ten Federal hatcheries operated by the Service produce a significant number of fish for stocking privately-owned waters primarily on farms located in the Southeastern states. During the period 1983-1985, these hatcheries annually distributed approximately 24.1 million fingerling or larger warmwater fish, of which 11.8 million (49%) were for stocking private waters. The Service recognizes that the fish stocked in these private waters provide a significant contribution to recreational fishing for the residents of the states involved. However, such stocking is not consistent with identified Federal fishery responsibilities and clearly does not constitute a Federal obligation. Fish production from Federal hatcheries is intended primarily to support restoration of depleted interjurisdictional fishery resources, to compensate for the impacts of Federal water development, and for the recovery of candidate and listed endangered species.

The Service had intended, in close cooperation with the States, to gradually phase out stocking of private waters and redirect production capability toward such explicit Federal responsibilities as restoration of interjurisdictional anadromous and estuarine resources. As this phase-out proceeded, fish production capabilities needed to support Federal responsibilities would be closely evaluated and any unneeded facilities transitioned to State operation or disposed of. However, given the Federal budget situation and the critical need to reduce Federal expenditures, the Department and Service believe immediate consideration of actions to secure realignment of facilities and attendant cost savings is appropriate.

This proposal would terminate all Federal fish production at these 10 hatcheries intended for stocking private waters. Those hatcheries with the greatest potential for future contribution to Federal responsibilities would be retained in operation; those with less potential would be transferred to State operation or closed. The following six hatcheries are proposed for transfer or closure on the basis that their potential to effectively and efficiently address high-priority Federal fish production responsibilities is limited, primarily because of geographical location and/or facility capability.

Carbon Hill NFH, AL (-$126,000): This warmwater hatchery was established in 1939 under authority of the Appropriation Act of June 25, 1938 (52 Stat. 1127). The hatchery has primarily produced sunfish, channel catfish, largemouth bass, and striped bass. Annual distribution during the FY 1983-1985 period averaged approximately one million fingerlings and larger fish for stocking waters in Alabama, Mississippi, and Tennessee. Of this total, about 674,000 (73%) were for State-managed waters in Federal reservoirs. About 251,000 (27%) were distributed to other State-managed and private waters. The portion of the production that relates to Federal responsibilities could be assumed by other national fish hatcheries in Meridian, MS.; Millen, GA.; and Welaka, FL. The 64-acre hatchery site is owned by the Service and there is no known impediment to transfer or disposal.

Mammoth Spring NFH, AR (-$146,000 FTE): This warmwater hatchery was established in 1904 under authority of the Appropriation Act of March 3, 1903 (32 Stat. 1107). The hatchery produces sunfish, channel catfish, and largemouth, smallmouth, and striped bass for stocking waters in Arkansas. During the FY 1983-1985 period, annual distribution averaged approximately 900,000 fingerling and larger fish. This included approximately 430,000 fish (51%) to State-managed waters in Federal reservoirs and 419,000 (49%) to other State-managed and private waters. Gulf coast strain of striped bass broodstock currently held at Mammoth Spring could be transferred to other facilities and the limited production for high-priority Federal responsibilities assumed by the Tishimingo, OK, NFH or other national fish hatcheries. The 37-acre site would revert to the estate of the donor if its use for a fish hatchery were terminated.

Warm Springs NFH, GA (-$126,000): This warmwater hatchery was established in 1899 under the Appropriation Act of July 1, 1898 (30 Stat. 612). The hatchery produces sunfish, catfish, largemouth bass, and striped bass for stocking waters in Georgia and Florida. In the 1983-1985 period, annual distribution averaged approximately 0.5 million fingerling and larger fish. Approximately 52,000 fish (8%) contributed to Federal programs. The balance of the production (92%) was for non-federal, state-managed, and private waters. The limited production related to Federal responsibilities could be assumed by other national fish hatcheries (Meridian, MS; Welaka, FL; Orangeburg, SC; Tishomingo, OK). The hatchery site consists of 56 acres of land, of which 19 acres would revert to the estate of the donor if its use for a fish hatchery were terminated.

Frankfort NFH, KY (-$139,000): This warmwater hatchery was established in 1952 under authority of a special act of July 18, 1950 (64 Stat. 343). The 114 acre hatchery site was provided to the Federal government by the State of Kentucky. The hatchery produces sunfish, catfish, largemouth bass, and striped bass. In the period 1983-1985, annual distribution averaged about 1,870,000 fingerling and larger fish for waters in Kentucky, Tennessee, and Maryland. Of this, approximately 85% was for State-managed waters, including Federal reservoirs, and 15% for privately-owned waters. The limited production for Federal responsibilities will be assumed by other Federal hatcheries (Meridian, MS; Senecaville, OH). The State of Kentucky has expressed some interest in assuming operation of this hatchery.

Natchitoches NFH, LA (-$152,000): This warmwater hatchery was established in 1931 under authority of the White Act (46 Stat. 371). The hatchery produces sunfish, catfish, and largemouth bass for stocking waters in Arkansas and Louisiana. In the 1983-1985 period, average annual distribution totalled about 5.2 million fingerling and larger fish. Approximately 14% of the production was for Federal programs (striped bass restoration and national wildlife refuges), whereas 46% and 40% was for State-managed and private waters respectively. That portion of the production related to Federal responsibilities could be assumed by other national fish hatcheries (Meridian, MS; Welaka, FL; Inks Dam, TX). There are no known impediments to transfer or disposal.

Pvt. John Allen NFH, MS (-$147,000): This warmwater hatchery was established as the Tupelo NFH in 1902 under authority of the Appropriation Act of March 3, 1901 (31 Stat. 1151). It raises sunfish, catfish, largemouth bass walleye, and striped bass for stocking in Mississippi and Tennessee. In the period 1983-1985, annual distribution averaged about 2.2 million fingerling and larger fish. Approximately 2% served Federal management purposes, whereas 18% went to State-managed waters and 80% to private waters. That portion of the hatchery's production accommodating Federal responsibilities could be assumed by other national fish hatcheries (e.g., Meridian, MS). The 28 acre hatchery site is owned by the Service and there is no known impediment to transfer or disposal.

In addition to transfer of the above facilities, this proposal would also terminate operation of one field station because of excessive out-year costs for necessary rehabilitation.

Bears Bluff NFH, SC (-$85,000): This facility, formerly a research station operated by the Environmental Protection Agency, is one of three units administered through the Orangeburg NFH. It was obtained by the Service in 1981 through surplus property disposal procedures for potential use in restoration of striped bass, sturgeon, and intercoastal estuarine fishes. Because of its location in a coastal estuarine area, with sources of both fresh and brackish water, it appeared to be potentially well suited for this need. However, the existing facilities provide only limited fish production capability by use of circular tanks in the main building. It is estimated that approximately $6 million would be required to fully develop efficient fish production facilities. Given the present and future fiscal situation, this substantial capital investment cannot be accommodated. The most critical potential Federal fish production need can be served through the existing Orangeburg NFH. There is no known legal impediment to disposal of the property.

Consistent with Congressional intent of the FY 1986 appropriation, these seven facilities will be operated in FY 1986 at approximately the same level of production as in recent years, including production for stocking private waters. However, prudent management requires the Department to take various actions to prepare for closure in FY 1987. These will include: reducing purchase of fish food to a level necessary to complete current-year production schedules; adjusting spawning, egg-collection, and incubation activities that would have been required in FY 1986 for FY 1987 programs; and deferring filling any currently vacant positions or positions that may become vacant during the year.

At the time of prior hatchery proposals in FY 1983-84, Congress directed that the facilities be made available for State fishery programs if the affected States so desired. The Service will work with interested States to conclude agreements for State assumption of operations effective October 1, 1986. The recent expansion of the D-J program (Wallop-Breaux) will provide an additional potential fund source to the States that could be used for this purpose. If the States choose not to assume operations, the stations will be placed in standby status on October 1, and arrangements made for disposal of facilities by the General Services Administration (GSA) under surplus property procedures. As hatchery personnel affected by this action will be afforded an opportunity to transfer to other national fish hatcheries or functions of the Fishery Resources Program, the FTE's allocated to the six units are retained in the subactivity total.

If the Service must maintain personnel at these stations in FY 1987 to protect facilities prior to State assumption of operation or GSA assumption of responsibility for the property, costs for salaries and other expenses will be absorbed within total funds available to the Service. Relocation costs of other personnel and costs for transfer of equipment and supplies to other hatcheries will also be absorbed within total funds. These costs cannot be precisely estimated because the actual dates of transfer/closure and personnel relocation are unknown. However, based on past hatchery transfers, these one-time costs could be as much as 50% of the first-year operational savings ($400,000 to $500,000), with some costs incurred in FY 1986.

REDUCE INTERPRETATION AND RECREATION ACTIVITIES (-$154,000): This proposal would close the aquarium/visitor facilities at six National Fish Hatcheries where there are separate buildings housing such facilities and would reduce I & R support activities at the Regional and Washington offices. This will provide operational savings of $167,000 without impacting essential fish production activities or compromising the basic resource mission of the hatcheries. The I & R facilities would be closed to the public and placed in caretaker status. As disposal of facilities is not planned (except for the aquarium at Natchitoches), the building would be maintained to prevent deterioration. The reduction in regional and Washington Office I & R allocations will be accommodated by suspending recreational/public use planning activities and deferring the updating and printing of hatchery information leaflets.

Aquarium/Visitor Center Closures:	
Welaka NFH, FL	-15,000
Millen NFH, GA	-15,000
Natchitoches NFH, LA	-15,000
Meridian NFH, MS	-13,000
Dexter NFH, NM	-14,000
Gavins Point NFH, SD	-46,000
	-$118,000

General Regional Reductions:	
Regional Offices (1, 3, 5, 7)	-21,000
Washington Office	-15,000
	-$36,000

Total Savings	-$154,000

Object Class Description

The object class detail for the $1,075,000 decrease is as follows:

Travel and transportation	50,000
Transportation of things	45,000
Rent, communications, and utilities	200,000
Other services (including contracts)	350,000
Supplies and materials	230,000
Equipment	200,000
	-$1,075,000

National Fish Hatchery Cyclical Maintenance: (-$994,000)

The Fishery Resource Activity base for hatchery maintenance is $4,581,000, including a non-budgeted FY 1986 increase of $994,000. As per Congressional directive, much of that increase is being used for specific repair work at the Greers Ferry, AR; Norfork, AR; and Nashua, NH National Fish Hatcheries. Completion of these one-time maintenance needs will restore these hatcheries to good operating condition. The proposed decrease will eliminate the FY 1986 increase and reduce the overall hatchery maintenance base to approximately $3.6 million, the same level as FY 1985. These funds will continue to be managed as a revolving account reallocated annually throughout the hatchery system depending on highest priority project needs in a particular year.

The Service is presently implementing a maintenance management system that will provide more effective identification, scheduling, and tracking of maintenance activities throughout the Service. The requested funds will be adequate to address essential hatchery maintenance needs until the Service maintenance management system is fully operational and specific facility maintenance inventories are completed.

Object Class Description

The object class detail for the $994,000 decrease is as follows:

Travel and transportation	-22,000
Transportation of things	- 15,000
Other services	-483,000
Supplies and materials	-356,000
Equipment	-118,000
	-$994,000

Activity: Fishery Resources
Subactivity: Lower Snake River Compensation Plan

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
Facility Operation	$	5,631	5,389	5,602	6,411	+809
and Maintenance	(FTE-T)	(14)	(14)	(14)	(14)	(0)
Total	$	5,631	5,389	5,602	6,411	+809
Requirement	(FTE-T)	(14)	(14)	(14)	(14)	(0)

Gramm-Rudman-Hollings Impact:

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Facility Operations and Maintenance	5,631	-242	5,389

As a result of the $242 thousand P.L. 99-177 reduction, restoration of Snake River spring chinook and steelhead runs will be marginally delayed. Some planned fish food and equipment purchases will be postponed; water pumping will be curtailed to reduce utility costs; and staffing for new facilities will be deferred. Total production from LSRCP facilities will be reduced by about 460,000 salmon and steelhead.

Authorization: 90 Stat. 2921; Water Resources Development Act of 1976 - authorized the Lower Snake River Compensation Plan to mitigate for fish and wildlife losses caused by power generation features at four Corps of Engineers dams on the lower Snake River in Washington.

16 U.S.C. 662; Fish and Wildlife Coordination Act - requires that the costs of constructing, operating, and maintaining measures to prevent or compensate for damages to fish and wildlife caused by a Federal project be considered integral costs of the project.

16 U.S.C. 838; The Federal Columbia River Transmission System Act - provides that the Bonneville Power Administration shall adjust rates for power sales in order to recover all project costs.

Objectives: Meet statutory requirements of the Lower Snake River Compensation Plan to:

- Restore the salmon and steelhead trout runs of the Snake River Basin that have been diminished due to construction and operation of four dams of the Lower Snake River Project located in the State of Washington. This restoration requires release of about 27 million juvenile anadromous fish annually to assure average adult returns of 18,300 fall chinook salmon, 58,700 spring and summer chinook salmon, and 55,100 steelhead trout to the Snake River basin.

- Assure the most effective use of Federal funds by Federal and state agencies who operate and maintain lower Snake River mitigation hatcheries.

- Mitigate the loss of non-anadromous fishery resources in the lower Snake River of Washington and Idaho by stocking 93,000 trout annually.

Program Description: The Snake River system was one of the outstanding river systems in the United States for the production of anadromous salmonids such as steelhead trout and Pacific salmon. In the past, anadromous fishery resources produced in the Snake River system contributed substantially to the large commercial, sport, and Indian treaty fisheries in the Columbia River system and Pacific Ocean fisheries from California to Alaska.

Construction of four dams on the lower Snake River was authorized in 1945. The first dam was completed by the U.S. Army Corps of Engineers (ACoE) in 1961 and the last in 1975. A major decline of Snake River salmon and steelhead fishery resources was detected within a few years after the first dam began operation. In response, the Fish and Wildlife Service and the National Marine Fisheries Service were requested by the ACoE in 1972 to prepare a special report about the impact of these dams on the anadromous fish resource of the entire Snake River basin. The report indicated that Snake River anadromous fish populations had decreased by half in just ten years. Major summer and fall chinook salmon runs, spring chinook salmon runs, and summer steelhead runs have subsequently been reduced to a much smaller fraction of their former abundance. By 1977, direct dam-related losses to Northwest fisheries exceeded $35 million annually.

To compensate for massive fishery losses, Congress authorized the Lower Snake River Fish and Wildlife Compensation Plan (LSRCP) in the Water Resources Development Act of 1976 (Section 102). The essential elements of the Compensation Plan include authorization for:

1) construction and operation of 22 fishery installations necessary for restoring fall, spring, and summer chinook salmon and steelhead trout runs to "compensate for .... losses" caused by the Corps of Engineers' Ice Harbor, Lower Monumental, Little Goose, and Lower Granite dams and locks. These facilities will produce 9,160,000 fall chinook; 6,750,000 spring and summer chinook; and 11,020,000 steelhead smolts (juvenile fish) annually;

2) construction and operation of hatchery facilities to produce 93,000 pounds of trout annually to compensate for losses to the resident fishery; and

3) acquisition and development of project and other lands for public access and habitat development.

The Plan established that construction of the necessary fishery resource mitigation facilities was to be carried out by the Corps of Engineers. Operation and maintenance of facilities was to be budgeted through one of the Federal fishery agencies. The Office of Management and Budget subsequently directed that the Fish and Wildlife Service assume this responsibility. Actual operation of facilities is carried out by the FWS and by the States under detailed cooperative agreements with the FWS. Assignment of budgetary responsibility to a single agency assures basin-wide oversight and management of LSRCP activities as well as full and effective coordination of all State/Federal fishery conservation efforts in the Pacific Northwest.

The Plan also established that the costs of constructing, operating, and maintaining fishery resource mitigation facilities are made necessary by the power production feature of the Lower Snake River Project and must be reimbursed from power sales revenue. Under terms of the Plan, anadromous fish losses are totally attributed to power production and, therefore, mitigation costs are subject to 100% reimbursement from project power revenues. Mitigation costs associated with resident fish losses are subject to 83.8% reimbursement from project power revenues. By legislative requirement, these costs must be reimbursed to the U.S. Treasury from project power revenues. Accordingly, the Bonneville Power Administration includes the costs of planning, operating, and maintaining LSRCP fishery resource mitigation facilities and programs when establishing rates for electric power sales from the Columbia River Power System. The FWS is funded for operations and maintenance of LSRCP mitigation facilities by annual direct appropriations to the Service's base operating account, the Resource Management Appropriation. The BPA subsequently reimburses the general Treasury for these O&M expenditures on the last day of the fiscal year in which they are incurred.

In general, funds appropriated to the FWS are used to:

- plan and coordinate all LSRCP activities;
- operate and maintain two Federal fish hatcheries constructed by the Army Corps of Engineers to assist in restoration of fish resources lost due to Federal water development projects on the lower Snake River;
- fund state operation of fishery mitigation installations constructed by the U.S. Army Corps of Engineers;
- integrate LSRCP mitigation efforts with the efforts of the three states, Indian, private, and other Federal agencies involved in restoring the anadromous fishery resources of the Snake River Basin;
- restore the non-anadromous trout resource of the Lower Snake River; and
- evaluate LSRCP implementation activities and quality of LSRCP hatchery production to assess progress toward mitigation and restoration goals.

FY 1986 Operational Funding Adjustments:

The estimated funding needs reflected in past budget requests for the LSRCP were based on a number of factors that are subject to a great deal of uncertainty and are often difficult to project accurately. These include such things as Corps of Engineers construction schedules for completion of facilities, estimated costs of implementing operations at new facilities by the States, projected operating/production costs when facilities are fully operational, 2-4 year projections of returns of spawning adults and subsequent availability of eggs. Particularly during the implementation phase of the program, many of these factors are continually changing or being adjusted necessitating subsequent adjustment in funding allocations. Changes were and are expected as the program evolves and a degree of flexibility is necessary for most effective use of the operational funding as facility construction and operations are implemented. The Service, States, Tribes, and other cooperating parties work very closely on a day-to-day basis to ensure the most effective and efficient implementation of the operational program.

Since the time the FY 1986 budget request was prepared, a number of changes in the construction schedule for certain facilities have taken place and minor management or operational needs arisen that require an adjustment in the allocation of FY 1986 funding as follows:

FY 1986 LSRCP Operations and Maintenance ($000)

Installation/Function 1/	(1) FY 1986 Request	(2) FY 1986 Enacted (-0.6%)	(3) FY 1986 Enacted Revised	(4) Change 86 Enc. 86 Rev.	(5) Gramm Rudman Reduct.	(6) Final FY 1986 Allocs.
Anadromous Fish Mitigation						
Irrigon SFH	735	733	739	(+6)	-32	707
Lookingglass SFH	281	280	291	(+11)	-13	278
Lyons Ferry SFH	960	958	1,004	(+46)	-43	961
Clearwater SFH	200	199	205	(+6)	-9	196
McCall SFH	265	264	318	(+54)*	-14	304
Sawtooth SFH	449	448	651	(+203)*	-28	623
Magic Valley SFH	700	698	267	(-431)*	-11	256
Dworshak NFH	160	160	170	(+10)	-7	163
Hagerman NFH	500	498	528	(+30)	-23	505
Fish Disease Biologist	20	20	20	(0)	-1	19
Resident Fish Mitigation						
Lyons Ferry SFH	250	248	256	(+8)	-11	245
Fishery Evaluations	929	926	929	(+3)	-39	890
LSRCP Coord./Regional Off.	200	199	253	(+54)*	-11	242
TOTAL OPERATIONS.........	5,649	5,631	5,631	(0)	-242	5,389

1/ NFH - National Fish Hatchery; SFH - State operated fish hatchery.

The changes (Column 4 in table above) at IRRIGON SFH, LOOKINGGLASS SFH, LYONS FERRY SFH, CLEARWATER SFH, DWORSHAK NFH, HAGERMAN NFH, and the FISH DISEASE BIOLOGIST Office are relatively minor changes (less than 6%) resulting from unanticipated operational/management needs arising since the budget request was prepared. These include such things as unanticipated changes in the cost of fish food or other supplies, higher than expected utility costs, unplanned equipment aquisition, and unanticipated personnel costs.

However, more substantial changes are required at four stations (indicated by asterik (*) in the table above):

MAGIC VALLEY SFH: At the time the FY 1986 budget request was prepared, it was projected that the facilities at the Magic Valley hatchery would be completed in late 1985 and full operations could be initiated in 1986. However, the Corps of Engineers has encountered substantial delays in construction of facilities and only limited operations are possible at this time. It will be at least late 1986 before full fish production operations can be initiated. Therefore, Operational funding of $267,000 will be adequate to meet the FY 1986 needs and the balance will be used to address essential operational needs at other LSRCP facilities.

McCALL SFH: The operational budget for the McCall SFH includes the operation of the South Fork Satellite facility (adult trapping and smolt release). The adult spawning returns to the South Fork Satellite have exceeded all expectations. It was originally anticipated that a number of years would be required to restore the level of returns already achieved. Consequently, operations at the South Fork Satellite are increasing much faster than expected and the funding needs, particularly during the winter months, are much higher than anticipated. For example, the increased operations require keeping the access road open year around with an estimated $20,000 annual snow plowing cost. An additional $54,000 is provided to the McCall SFH in FY 1986 to cover these unanticipated costs.

SAWTOOTH SFH: The original facility plans for the LSRCP included limited fish disease laboratory facilities at both Sawtooth and Magic Valley SFHs to serve the disease diagnostic and treatment requirements of each facility. However, it was later decided that consolidating the disease capability would be more cost-effective and provide better technical capability than separate facilities. Also, operation of the East Fork Satellite station has been expanded beyond that originally envisioned. In addition to serving as an adult trapping and smolt release facility for chinook salmon production at Sawtooth, the East Fork Satellite is also being used for adult trapping and smolt release in conjunction with steelhead trout production at Magic Valley SFH and Hagerman NFH. Consequently the East Fork Satellite is being operated for a much larger portion of the year than originally envisioned. The additional funds provided to Sawtooth in FY 1986 will be used to purchase laboratory/diagnostic equipment, chemicals, and other supplies and materials to implement the fish health capability and to maintain the expanded operations at the East Fork Satellite.

LSRCP COORDINATION OFFICE: One of the keys to the ultimate success of the LSRCP mitigation program is the evaluation component that is built into and funded through the plan. The Service and the States have initiated a number of evaluation studies designed to continually assess the effectiveness of the overall program in terms of restoring, protecting, and maintaining the fish runs. It was agreed by the cooperators that a staff position with primary responsibility for coordinating interagency evaluation activities was essential for an effective evaluation component. Consequently, an evaluation specialist position (biologist) was established at the Service's Boise office, and an additional $54,000 is allocated to the Boise office to cover the salary and associated cost of this position.

Changes for FY 1987

		FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) From Base
Facility Operations and Maintenance	$000 (FTE-T)	5,602 (14)	6,411 (14)	+809 (0)
Total Requirement	$000 (FTE-T)	5,602 (14)	6,411 (14)	+809 (0)

The FY 1987 request includes an increase of $809,000 to continue operational start-up at several new facilities and to begin operations at one new facility that will be completed in FY 1987. The proposed funding increase will allow continued progress toward achieving the fishery mitigation objectives of the Lower Snake River Compensation Plan to restore the anadromous fish runs of the Snake River. A summary of 1987 funding needs follows:

FY 1987 LSRCP Operations and Maintenance

Installation/Function 1/	FY 1986 Adjusted Approp. ($000)	FY 1987 Base ($000)	FY 1987 Estimate ($000)	Change (+/-) ($000)
Anadromous Fish Mitigation 2/				
Irrigon SFH	707	734	765	+31
Lookingglass SFH	278	289	350	+61
Lyons Ferry SFH	961	997	1,238	+241
Clearwater SFH	196	204	250	+46
McCall SFH	304	316	336	+20
Sawtooth SFH	623	647	661	+14
Magic Valley SFH	256	265	612	+347
Dworshak NFH	163	169	180	+11
Hagerman NFH	505	524	562	+38
Fish Disease Biologist	19	20	20	
Resident Fish Mitigation 3/				
Lyons Ferry SFH	245	254	254	
Fishery Evaluations	890	923	923	
LSRCP Coord./Regional Off.	242	260	260	
DIRECT OPERATIONS COST	$5,389	$5,602	$6,411	+809
Nonpower-related Resident Fish Mitigation Costs	-40		-41	
FWS General Administrative Costs	388		388	
Estimated Reimbursement to U.S. Treasury by the Bonneville Power Administration	$5,737		$6,758	

1/ NFH - National Fish Hatchery. SFH - State-operated fish hatchery.
2/ 100% reimbursed to the U.S. Treasury by Bonneville Power Administration.
3/ 83.8% reimbursed to the U.S. Treasury by Bonneville Power Administration.

Irrigon SFH (+$31,000)
The requested increase is to meet anticipated increases in the cost of fish feed and operational expenses. This will provide for effective utilization of the Irrigon hatchery and the broodstock and smolt release facilities at Wallowa and Little Sheep Creek satellite stations.

Lookingglass SFH (+$61,000)
This hatchery is concerned primarily with restoration of spring chinook runs in the Snake River. Fish production operations were initiated in FY 1983 and production was expanded to current levels in FY 1984. By 1987, it is anticipated that the number of returning adults should increase sufficiently to provide adequate eggs to increase smolt production to the the full level necessary to provide 18,500 returning spring chinook adults,

the restoration target for production from this hatchery. The proposed increase would provide funding for this increased production.

Lyons Ferry SFH - Anadromous Fish Mitigation (+$241,000)
Because of the large water-pumping requirement for production at the Lyons Ferry/Tucannon complex, operational costs have been much higher than anticipated when the facilities were designed and constructed. Also, production of fall chinnok salmon for restoring runs in lower Snake River tributaries is getting under way. The proposed increase will provide for full production at the complex and will provide for utilization of all facilities to meet the anadromous and resident trout restoration goals of the LSRCP.

Clearwater SFH (+$46,000)
The first production facilities at Clearwater are scheduled for completion in 1987. Initial operational funds for Clearwater where provided in FY 1986 to provide for development of staff and operational procedures as construction proceeds and operations are phased in. This hatchery will produce steelhead and chinook smolts to meet LSRCP objectives for the Clearwater River basin. Fish from this facility will be stocked at numerous sites throughout the basin. The requested increase will provide procurement of fish food and other supplies so that some fish production activities can commence immediately upon completion of construction.

McCall SFH (+$20,000)
Sawtooth SFH (+$14,000)
The requested increases will provide for anticipated increases in operational costs primarily associated with the South Fork and East Fork Satellite trapping and release facilities. As explained previously, FY 1986 funding was reallocated to provide additional funding to these facilities for greater than anticipated returns and expanded operations at the satellite facilities. The proposed increases would provide for increasing operating costs as the numbers of returning spawning adults increases.

Magic Valley SFH (+$347,000)
As explained previously, this facility was originally scheduled to be completed and operations initiated in FY 1986. However, because of construction delays, completion was delayed until late 1986. FY 1986 operational funding was reduced to approximately $256,000 and the balance reallocated to other LSRCP needs. Facilities should be ready for operation by FY 1987. The proposed increase will permit hire of the entire hatchery staff, purchase of fish food and other necessary supplies, and effective operation of the facility during the first complete year of fish production.

Dworshak NFH (+$11,000)
Hagerman NFH (+$38,000)
The proposed increases will cover anticipated increases in the cost of fish feed and utilities necessary to continue full production at Dworshak and Hagerman NFHs for LSRCP programs.

Object Class Description

The object class detail for the $809,000 increase is as follows:

Travel and Transportation of Persons	$ 32,000
Supplies and Materials	87,000
Communications, Utilities, and Rent	15,000
Equipment	20,000
Other Services	655,000
Total	$809,000

The following figure and tables are provided for informational purposes:

Figure 1:	The area subject to the provisions of the LSRCP and the location of LSRCP installations.
Table 1:	Current construction completion schedule of LSRCP mitigation facilities.
Table 2:	Past and projected future funding needs for operation and maintenance of LSRCP facilities through FY 1988.

FIGURE 1

LOWER SNAKE RIVER COMPENSATION PLAN FACILITIES

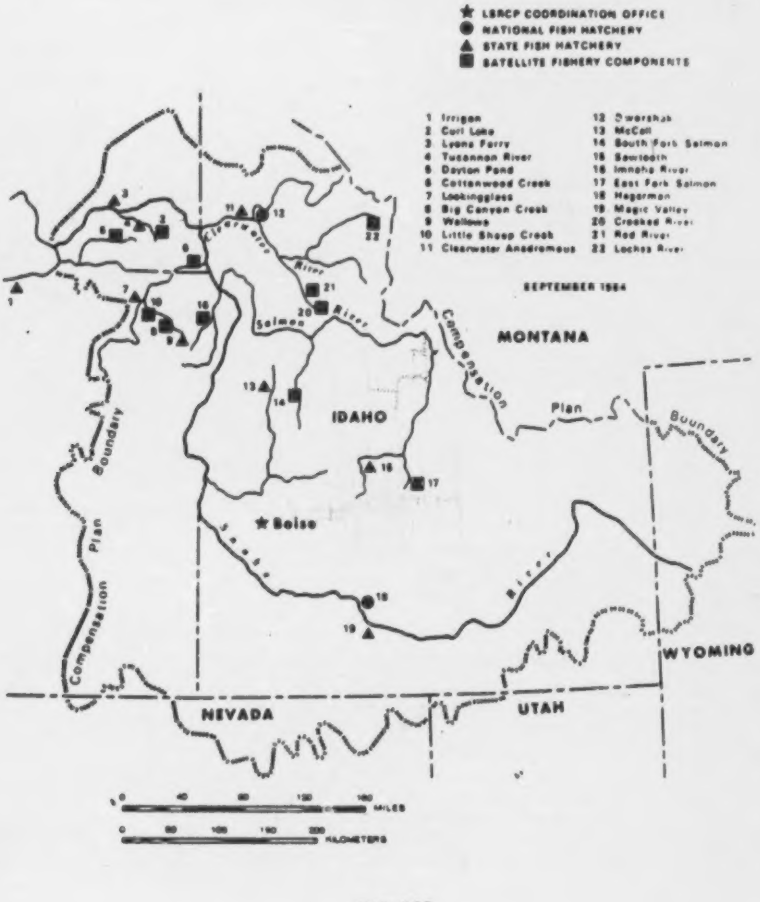
★ LSRCP COORDINATION OFFICE
● NATIONAL FISH HATCHERY
▲ STATE FISH HATCHERY
■ SATELLITE FISHERY COMPONENTS
1 Irrigon
2 Curl Lake
3 Lyons Ferry
4 Tucannon River
5 Dayton Pond
6 Cottonwood Creek
7 Lookingglass
8 Big Canyon Creek
9 Wallowa
10 Little Sheep Creek
11 Clearwater Anadromous
12 Dworshak
13 McCall
14 South Fork Salmon
15 Sawtooth
16 Imnaha River
17 East Fork Salmon
18 Hagerman
19 Magic Valley
20 Crooked River
21 Red River
22 Lochsa River
SEPTEMBER 1984
Clearwater River
Salmon River
Snake River
Compensation Plan Boundary
MONTANA
IDAHO
★ Boise
WYOMING
NEVADA
UTAH
0 40 80 120 160 MILES
0 50 100 150 200 KILOMETERS

Table 1.

LOWER SNAKE RIVER COMPENSATION PLAN
Fish Mitigation Facility Construction Schedule *

Facility	Projected Completion Date (Mon/Yr)	Construction Cost ($000)
ANADROMOUS FISH RELATED FACILITIES		
Irrigon SFH	10/85	$7,819
Wallowa Satellite (T/A)	5/85	2,127
Little Sheep Creek Satellite (T/A)	2/85	1,150
Lookingglass SFH	11/82	5,540
Big Canyon Satellite (T/A)	2/86	1,617
Imnaha Satellite (T/A)	3/87	1,325
Lyons Ferry SFH	11/83	20,050**
Tucannon Satellite (T/A)	11/84	2,396
Dayton Pond Satellite (A)	2/86	500
Curl Lake Satellite (A)	2/85	143
Cottonwood Creek Satellite (A)	2/85	532
Clearwater Anadromous SFH	9/87	16,607
Crooked River Satellite (T/A)	3/88	2,000
Red River Satellite (T/A)	3/88	500
Powell Satellite (T/A)	3/88	2,125
McCall SFH	9/81	4,694
South Fork Satellite (T/A)	7/80	753
Sawtooth SFH	11/84	8,436
East Fork Satellite (T/A)	11/83	1,252
Magic Valley SFH	11/86	7,312
Dworshak NFH	11/82	1,539
Hagerman NFH	4/84	6,640
RESIDENT FISH RELATED FACILITIES		
Lyons Ferry SFH	11/84	(20,050)**
TOTAL ESTIMATED CONSTRUCTION COST (Corps of Engineers)		$95,057

SFH - State-operated Fish Hatchery
NFH - FWS-operated Fish Hatchery
T - Adult Trapping Site
A - Smolt Acclimation/Release Pond
* Reflects C of E schedules as of June 15, 1985.
** Total construction cost for Lyons Ferry SFH, including both anadromous and resident fish production facilities, is $20,050.

TABLE 2.

January 31, 1986

FWS Expenditures and Cost Estimates for Operation of Lower Snake River Compensation Plan Facilities and Programs

(Dollars in Thousands)

Installation/Program 1/	Fiscal Year 1980 2/	1981 2/	1982 2/	1983 2/	1984 2/	1985 2/	1986 3/	1987 4/	1988 4/	1989 4/	1990 4/	1991 4/
ANADROMOUS FISH RELATED OPERATIONS												
Irrigon SFH	0	0	0	0	198	399	707	765	790	830	855	891
Lookingglass SFH	0	0	0	161	250	321	278	350	350	364	387	393
Lyons Ferry SFH	0	0	0	255	450	972	961	1,238	1,238	1,316	1,325	1,554
Clearwater Anadromous SFH	0	0	0	0	0	0	196	250	1,345	1,405	1,461	1,498
McCall SFH	72	111	140	160	227	265	304	336	336	364	364	525
Sawtooth SFH	0	0	0	88	282	403	623	661	661	721	733	873
Magic Valley SFH	0	0	0	0	24	106	256	612	700	728	757	757
Dworshak NFH	0	0	127	130	159	154	163	180	180	187	187	195
Hagerman NFH	180	225	380	468	520	475	505	562	562	571	623	623
Fish Disease Biologist	0	0	22	10	25	10	19	20	20	20	20	27
Egg Banks	50	74	128	121	221	0	0	0	0		0	0
-Fall Chinook	50	69	118	121	221							
-Idaho Spr. Chinook		3	10									
-Oregon Spr. Chinook and Steelhead		2										
RESIDENT FISH RELATED OPERATIONS												
Lyons Ferry SFH	0	0	0	85	187	225	245	254	254	272	272	282
FISHERY EVALUATIONS	0	2	185	367	825	925	890	923	929	929	929	929
LSRCP COORDINATION/REGIONAL OFFICE	24	58	47	159	164	240	242	260	260	260	260	260
GENERAL ADMIN. SERVICES 5/	22	41	0	218	117	0	0	0	0	0	0	0
LSRCP DIRECT O & M COSTS	348	511	1,029	2,222	3,649	4,495	5,389	6,411	7,625	7,967	8,173	8,807

1/ SFH - Federally-owned, State-operated fish hatchery; NFH - National Fish Hatchery (FWS operated).

2/ Operational expenditures in prior years.

3/ Revised allocation of the FY 1986 appropriation; includes internal adjustments reflecting C of E construction schedule changes, and a 4.3% reduction for the Gramm-Rudman-Hollings deficit reduction act.

4/ Projected out-year operations and maintenance funding needs based on Corps of Engineers construction schedules as of June 15, 1985.

5/ General FWS administrative costs (e.g., personnel management, financial management, contract management) incurred in support of LSRCP activities. From FY 1982 - FY 1984 this was included in the Fishery Resources Budget Activity. In FY 1985, this funding was shifted to the General Administration Budget Activity consistent with other Resource Management funding in the FWS. State administrative costs are included in the annual facility operations contracts.

Activity: Fishery Resources
Subactivity: Refuge Operations and Maintenance

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
Refuge Fishery	$	2,164	2,071	2,148	2,148	(0)
Management	(FTE-T)	(35)	(35)	(35)	(35)	(0)
Total	$	2,164	2,071	2,148	2,148	(0)
Requirements	(FTE-T)	(35)	(35)	(35)	(35)	(0)

Gramm-Rudman-Hollings Impact:

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Refuge Fishery Management	2,164	-93	2,071

The major impact of the P.L. 99-177 reduction will occur in fishery management programs on refuges in Alaska, because the majority of the funding under this subactivity is allocated there. A vacant staff position in planning will not be filled in Region 7 (Alaska) delaying the completion of fishery management plans for national wildlife refuges and fish resource considerations in the Comprehensive Conservation Plan process. Also, a creel census project on Kodiak NWR will not be conducted and a sockeye smolt counting operation on the Becharof NWR, a cooperative project between Alaska Fish and Game and the Service, will not be supported by the Service delaying development of information needed for more effective management of the fishery resources of the respective refuges.

Authorization: 16 U.S.C. 742a-742j, Fish and Wildlife Act of 1956 - Directs the Secretary of the Interior to provide continuing research, extension, and information services, and to take steps to develop, manage, protect, and conserve fishery and wildlife resources.

16 U.S.C. 460k-460k-4; Recreational Use of Fish and Wildlife Areas - Commonly known as the Refuge Recreation Act of 1962, authorizes the Secretary of the Interior to administer refuges, hatcheries, and other conservation areas for recreational use when such use does not interfere with the primary purpose for which these areas were established.

16 U.S.C. 668dd-668ee; National Wildlife Refuge System Administration Act of 1966 - Constitutes an "Organic Act" for the National Wildlife Refuge System and provides guidelines and directives for administration and management of all areas in the system.

16 U.S.C. 3101; Alaska National Interest Lands Conservation Act - Provides for the designation and conservation of certain public lands in Alaska, including designation of units of the National Wildlife Refuge System.

Establishes 9 new and enlarges 7 existing national wildlife refuges, directs specific studies of fish and wildlife resources, and establishes subsistence use of renewable resources as the priority use on public lands in Alaska.

18 U.S.C. 41; 62 Stat. 686; Refuge Trespass Act of 1909 - This Act, as amended, makes it unlawful to hunt, trap, capture, willfully disturb, or kill any bird or wild animal on a national wildlife refuge, except as permitted.

Objectives:

- Maintain and utilize in their natural ecosystems fish species native to the waters contained within the National Wildlife Refuge System.
- Manage the diverse native and introduced species of fish and wildlife on refuges at population levels compatible with the primary purpose of the refuge and consistent with the needs of public users.
- Support the Recreational Use of Fish and Wildlife Areas Act of 1962 by enhancing the opportunity for the visiting public to enjoy a fish and wildlife resource-related educational or recreational experience by providing for recreational fishing on national wildlife refuges when compatible with the primary purpose of the refuge.

Base Program: About 4.5 of the 12 million acres of water encompassed by refuges has significant fishery values, in addition to those for waterfowl, and can provide sport fishing opportunities compatible with primary refuge purposes. Sport fishing is one of the largest single public-use activities on national wildlife refuges, comprising 31% of all public use. This represents more than 22 million activity-hours of fishing each year. The Okefenokee National Wildlife Refuge has long been known as an excellent largemouth bass, bluegill, and crappie fishing area. Some of the strongest advocates for its protection and expansion have been fishing organizations. Havasu and Imperial Refuges on the lower Colorado River and Crab Orchard Refuge in Illinois have high levels of recreational fishery use. Marine recreational fishing is a substantial public use at Parker River, Ding Darling, and Chincoteaque National Wildlife Refuges.

Projected outputs for fishery management work on non-Alaskan refuges follow:

	FY 1985	FY 1986	FY 1987
Refuges Served	40	40	40
User-Days of Fishing (Millions)	1.4	1.4	1.4

NATIONAL WILDLIFE REFUGES IN ALASKA: The FY 1986 appropriation includes approximately $2.1 million for fishery management activities on national wildlife refuges. Of this, approximately $1.9 million is related to fishery work on national wildlife refuges in Alaska to implement requirements of the Alaska National Interest Lands Conservation Act (ANILCA). This work is concerned primarily with baseline surveys and fishery habitat assessments necessary to carry out the comprehensive refuge planning efforts mandated by the Act. The Service closely coordinates its work with the State of Alaska in the interest of the fishery resources on these refuges. The effort of the State is generally directed toward management of the commercial, sport, and subsistence harvest, and the effort of the Service toward accumulation and assessment of resource baseline data and management of the habitat. Present Service effort emphasizes the collection and analysis of resource data necessary for completing the comprehensive plans and studies required by the Act.

A major objective of ANILCA is to promote the appropriate multiple use of refuge lands in a manner compatible with the primary purposes of the refuges. Activities that will impact the fishery habitat and populations on refuges are expected to increase significantly in the years ahead. They include both consumptive and nonconsumptive uses such as increased recreational, subsistence, and commercial fishing; and oil, gas, and mineral exploration and development. As these activities develop, "compatibility determinations" will be made to establish if the activities are compatible with refuge purposes and if they can be carried out without seriously threatening the fish and wildlife resources. These determinations must be based on the refuge objectives as presented in the comprehensive plans, and on a solid background of resource data.

In FY 1987, fishery management plans will be prepared for Togiak, Kanuti, Koyukuk, Tetlin, and Yukon Flats NWRs in Alaska. Some of these refuges provide habitat for Pacific salmon and other species during important phases of their life histories.

NATIONAL WILDLIFE REFUGES IN THE CONTIGUOUS 48 STATES: Base-program work in the Lower 48 States consists primarily of assessing the potential of fishery resources on refuges and developing fishery management plans encompassing management objectives compatible with refuge purposes. The assessments provide the data and knowledge necessary to establish management objectives in the plans. The end-result is a program that will assure development of the ultimate potential of the fishery resources of the refuge system for serving the American public.

Within the limited funding available, the Service has initiated efforts to improve fishery management on refuges in the lower 48 states. The basic approach followed is 1) assessment of the fishery resources within the refuge (species, distributions, population characteristics, etc.); 2) development of a fishery management plan to optimize use of the available resources; 3) incorporation of the fishery management plan into the overall refuge operational plan assuring compatibility with the primary purpose(s) for which the refuge was authorized; and 4) implementation of the final fishery management objectives.

In FY 1987, fishery management plans will be prepared for 9 National Wildlife Refuges in the lower 48 States. Eight of these nine are new starts; one is a continuation from FY 1986. The nine refuges are: Pahranagat, NV; Pablo, MT; Arrowhead, ND; Audubon, ND; Lake Ilo, ND; Lake Alice, ND; Silver Lake, ND; Sully's Hill National Game Range, ND; and J. Clark Salyer, ND.

Activity: Fishery Resources
Subactivity: Law Enforcement and Protection

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
Law Enforcement	$	2,153	2,060	2,075	2,075	0
and Protection	(FTE-T)	(42)	(42)	(42)	(42)	(0)
Total	$	2,153	2,060	2,075	2,075	0
Requirements	(FTE-T)	(42)	(42)	(42)	(42)	(0)

Gramm-Rudman-Hollings Impact:

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Law Enforcement and Protection	2,153	-93	2,060

As a result of the $93 thousand P.L. 99-177 reduction, law enforcement efforts will be reduced by about the equivalent of 1.5 agent staff-years in the Fishery Resources Program. In some areas the law enforcement activity will be focused only on complaints involving the highest priority species. Aggressive investigation and intelligence gathering, including covert operations, to identify and apprehend major offenders will be curtailed. Reduction can be partially compensated through greater reliance on local and State law enforcement agents for essential enforcement activities.

Authorization: 18 U.S.C. 42; 16 U.S.C. 3371-3378; The Lacey Act Amendment of 1981 - Provides authority to the Secretary of the Interior to "regulate the introduction of American or foreign birds or animals into new locations, and to collect and publish information on wild birds." The Lacey Act also prohibits the transportation and importation of wildlife and plants taken in violation of State, Federal, Indian tribal, and foreign laws. This Amendment incorporates provisions of and supersedes the Black Bass Act.

Objectives:

- To enforce Federal laws pertaining to fish resources and thereby protect these resources from unlawful exploitation and harm.
- To enhance the scientific management of fishery resources by decreasing illegal exploitation that results in uncertainty of essential management data such as estimated harvest and estimated total mortality of important interstate, national, and international fishery resources.

Base Program: The primary emphasis of fishery-related law enforcement activities is on interjurisdictional, anadromous, and Great Lakes fishery resources. The Service also cooperates with States in enforcement of State laws pertaining to fish as determined by cooperative agreements or as directed by the courts. The law enforcement effort concentrates on illegal commercial fishing on Pacific and Atlantic anadromous and on Great Lakes lake trout and other transboundary fishery resources. Both covert and overt investigative techniques are used to identify major violators who are illegally harvesting fish for commercial purposes.

The Lacey Act Amendment of 1981 serves as the major legal authorization for the effective control of illegal fish harvest. This Act provides felony penalties for subjects convicted of interstate trafficking of fish taken in violation of Federal or State regulations. These penalties increase substantially the risk of marketing illegally taken fish, thus greatly increasing the hazard and decreasing the incentive for illegal fishing. The Act has recently been used very effectively in cases relating to the marketing and sale of illegally caught salmon and steelhead on the West Coast and striped bass on the East Coast. Effective enforcement of the Act serves to discourage illegal commercial fishing activities in these problem areas.

A general overview of total Service law enforcement funding and activities is included under the Wildlife Resources Activity. The following outputs for the Fishery Resources Law Enforcement and Protection Subactivity reflect the actual work being done in the field.

	FY 1985	FY 1986	FY 1987
Lacey Act Fish Violations	578	575	575

Several recent FWS/State cooperative investigations demonstrate the potential impact of illegal activities on the resources and the effectiveness of covert techniques in exposing illegal activities. The Service, in cooperation with a number of East Coast States, acted to curtail the illegal take of over-sized striped bass, a species whose population has declined dramatically in recent years. Two major investigations, "Operation Rock" in North Carolina and an untitled operation centered in the Northeast, culminated in January 1985 with the exposure of significant illegal marketing operations.

Operation Rock, a two year undercover probe into an estimated $3 million per year illegal rockfish (striped bass) trafficking operation, culminated on January 16, 1985, with 24 arrests and the execution of 17 search warrants and subpoenas resulting in the seizure of business records and property inlcuding nine trucks, assorted fish preserving and transport paraphenalia, and 704 pounds of frozen striped bass. As of January 1, 1986, this case has resulted in 17 convictions (6 felony); a total of 4 years and 6 months of jail sentence (an additional 29 years and 1 month were suspended); 58 years of probation; $74,191 in fines; $10,000 in civil penalties; and forfeiture of property valued at nearly $30,000. In adddition, $58,191 in replacement and restitution payments have been made to the State of North Carolina for approximately 700 pounds of striped bass.

Simultaneous action by other FWS Special Agents and their state counterparts in Maryland, Pennsylvania, Virginia, and New York resulted in a total of 36 arrests pertaining to the undercover purchase of 6,676 pounds of illegal striped bass in Virginia and Maryland and 3,458 pounds of illegal freshwater salmon and trout from Pennsylvania and New York. To date, 40 convictions, 2,882 days of jail sentence, 55 years of probation, and $188,000 in fines have resulted from the case. Over $55,000 of the monetary penalties have been directed by the Federal court to support joint State of Maryland/Fish and Wildlife Service striped bass restoration efforts. The striped bass investigations in Maryland and Virgina contributed to the decision on the part of Virginia authorities to impose a 6-month moratorium on the taking, transportation, and possession of striped bass. As a spin-off of this effort, the Maryland Department of Natural Resources has uncovered an additional 250 violations of illegal commercialization of striped bass, shad, and sturgeon.

These types of illegal activities undermine Service efforts to restore nationally significant fishery resources, adversely impact the Department's trust responsibilities to treaty Tribes in the Great Lakes and along the Pacific coast, and negate progressive stewardship efforts of the States who, separately, are unable to halt the interstate distribution of illegally taken fish. The Service plans to continue directing law enforcement emphasis toward the investigation of major illegal commercialization of fish and wildlife resources on the basis that this will provide the most benefit to the resources for the dollars invested. In addition to the immediate benefits of specific enforcement activity, a broader and longer lasting value of law enforcement is the deterrent effect it creates.

Activity: Fishery Resources
Subactivity: Population Management

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
Technical Assistance	$ (FTE-T)	2,149 (55)	2,057 (55)	2,071 (55)	2,285 (55)	+214 (0)
Total Requirements	$ (FTE-T)	2,149 (55)	2,057 (55)	2,071 (55)	2,285 (55)	+214 (0)

Gramm-Rudman-Hollings Impact:

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Technical Assistance	2,149	-92	2,057

As a result of the $92 thousand P.L. 99-177 reduction, there will be decreases in travel, overtime, equipment, and supply purchases. It may be necessary to defer filling some vacancies that occur. The reduced level of technical assistance will principally affect projects in the Pacific northwest and Atlantic northeast. The amount of assistance provided on the Yakima Indian Reservation and Yakima River will be decreased and personnel stationed there will be pulled back to the main OFA station at Olympia to reduce station overhead costs. Planned radio-tracking of Atlantic salmon in the Merrimack River will be cancelled.

Authorization: 16 U.S.C. 661-666, Fish and Wildlife Coordination Act - Authorizes assistance to Federal, State, and other agencies in development, protection, rearing, and stocking of fish and wildlife and controlling losses thereof.

16 U.S.C. 742a-742j, Fish and Wildlife Act of 1956 - Directs the Secretary of the Interior to provide continuing research, extension, and information services, and to take any necessary steps to develop, manage, protect, and conserve fishery and wildlife resources, including research.

16 U.S.C. 931-939, Great Lakes Fishery Act of 1956 - Implements the Convention on Great Lakes Fisheries between the United States and Canada.

Objectives:

- Restore and maintain anadromous and transboundary fish stocks, such as Pacific salmon and steelhead, Atlantic salmon, Great Lakes lake trout, and striped bass, to levels determined by international agreements, comprehensive management plans, cooperative agreements, and memoranda of understanding.

- Mitigate fishery losses due to Federal resource development projects through the development and/or implementation of fishery management plans and strategies.

- Assess and analyze fishery resources and develop strategies for management on other Federal and Indian lands through cooperative, reimbursement-based, agreements with other Federal agencies.

- Cooperate with the States, Indian tribes, and other fishery management agencies to avoid duplication of effort and unwise expenditures in the acquisition and analysis of data, and other common operational tasks such as distributing and stocking fish.

Base Program: The Fish and Wildlife Service maintains a cadre of professional fishery biologists who provide expertise in management of anadromous and Great Lakes fisheries, and those inland fishery resources where the Federal Government has a responsibility.

The activities of the management biologists are essential to successful development of management plans that guide coordinated, multi-agency programs, for restoration and mitigation of interjurisdictional resources. Assessments and evaluations conducted by the biologists enable better understanding of the condition of resources and the effectiveness of management actions. These services, along with research, enforcement, and production, constitute an holistic approach to protection and wise use of national and international fishery resources.

Projected outputs for the Population Management Subactivity are:

	1985	1986	1987
Management Areas Served	155	155	155
Surface Acres of Impoundments Served (000)	583	583	583
Miles of Stream Served	15,611	15,611	15,611

An important function of the Service's fishery management biologists has been to act as technical agents for biological data essential to Indian treaty rights. This is in support of the Secretary of the Interior's trust responsibilities to Treaty Tribes for fishery issues associated with the Boldt and Belloni case areas, Great Lakes treaty-ceded waters, and Klamath River salmon stocks. The Service acts as a neutral "third party" advisor to the Solicitor and the Department of Justice regarding the biological implications relating to resource allocation or other issues that arise. Much of the Indian-related activity assistance is funded by the Bureau of Indian Affairs under reimbursable agreements with the Service.

ACTIVITIES RELATING TO ANADROMOUS FISH include the accumulation and evaluation of data on spawning and nursery areas; spawning success; distribution and abundance; migratory patterns and habits; and levels of recreational, commercial, and subsistence harvest. These data are essential to State, Federal, Tribal and international fishery managers for developing fishing and harvest regulations and for protecting existing fish populations and/or restoring them to their historic range. Surveys of anadromous fish stocks enable fishery managers to develop appropriate conservation and development plans on a basinwide or interstate basis.

Other activities include participating as scientists and resource managers in regional, national and international forums that manage anadromous resources through allocation among users. These efforts are directed by legislation such as the U.S./Canada Pacific Salmon Treaty, the Magnuson Fishery Conservation and Management Act of 1976, and the Pacific Northwest Electric Power Planning and Conservation Act. To meet the continuing participation needs, particularly for various Panels developed by the U.S./Canada Salmon Treaty and for Yukon River assessments, the non-budgeted FY 1986 increase of $398,000 for implementing the Treaty has been annualized in the FY 1987 base. This action will assure that the Service can address initial Treaty obligations.

ACTIVITIES IN THE GREAT LAKES region focus on 1) restoring lake trout and other fish stocks and 2) controlling sea lamprey populations as part of an international cooperative effort to restore the Great Lakes fishery resources. Service research and management biologists furnish technical and diagnostic expertise for fish disease control in State and Federal hatcheries, provide technical assistance to Indian tribes fishing in treaty-ceded waters, cooperate with State and Canadian fishery managers in the collection and analysis of data pertinent to fishery management, and evaluate the effectiveness and impacts of sea lamprey control.

ACTIVITIES RELATING TO INLAND FISHERIES are primarily concerned with developing basic data on the status of fishery resources on Federal and tribal lands that are important to the Nation's recreational fishermen. Key areas include Yellowstone National Park; Indian Reservations in Wyoming, Arizona, New Mexico and Montana; and military bases and reservations. Progress in this work requires close collaboration among Service personnel in fish hatcheries and fishery research, and with State, other Federal, and Tribal officials. Activities also include evaluation of Federal hatchery stocking efforts, collection of wild broodstock and eggs for hatchery and research purposes, and allocation of hatchery produced fish needed on Federal lands or to compensate for the impacts of Federal water development projects on fish resources.

Changes For FY 1987

		1987 Base	1987 Estimate	Inc.(+) or Dec.(-)
Technical Assistance	$000	2,071	2,285	+214
	(FTE-T)	(55)	(55)	(0)

Analysis/Clarification of FWS Responsibilities for Implementation of Fishery Mitigation: (+$214,000)

A major responsibility of the Fishery Resources Program (FRP), as identified in the recent "Statement of Responsibilities and Role" (R&R) is to ensure that resource mitigation measures, identified by the Habitat Resources Program (HRP) through Fish and Wildlife Coordination Act Reports and implemented by the FRP are efficient, effective, and actually address mitigation requirements. The HRP assumes the lead in identifying and developing fishery mitigation requirements in the planning and preconstruction phases of development projects. The FRP assumes the lead in the subsequent implementation of required mitigation, including operation of fish passage facilities, rehabilitation of habitat, and provision of hatchery fish. A significant portion of the Service's fish production activity is related to compensation for fish resource losses resulting from various Federal development projects. The Service believes that, to the extent possible, mitigation costs (including mitigation-related fish production) should be assumed by the beneficiaries of development projects. The Service intends to pursue recovery of these mitigation costs wherever possible.

To recover FRP mitigation implementation costs, it is necessary to clearly delineate the extent of the Federal (FWS) responsibility. In many instances, particularly in regard to development projects authorized in the 1930's, 1940's, 1950's or earlier, the intended parameters of the Federal fishery mitigation responsibility were never clearly defined. For example, the authorization for various Federal dam and reservoir projects provided for construction of a new national fish hatchery, or provision of fish from existing national fish hatcheries, to compensate for fishery losses. However, in many instances, although the legislative intent to provide "mitigation" by compensating with hatchery production is apparent, no clear definition of the specific fish resource losses to be compensated, the intended level of compensation (i.e., species/numbers/pounds of fish), or the precise process for providing the compensation were established. In fact, in some cases, hatchery construction funding was subsequently appropriated through the FWS rather than through the project development agency. Also, as the reservoir ecology, human population growth, and other factors impacting a project change, pressure often develops to expand the compensating fish production to meet increasing public fishing and/or related fishery management demands. Often this demand ultimately far exceeds the value of the original displaced resources or the intended fishery benefits of the project, obscuring the mitigation responsibility as opposed to additional resource enhancement. Consequently, it is difficult to pursue recovery of costs for this "de facto" mitigation from project beneficiaries because the nature and extent of the Federal responsibility has never been precisely defined.

Some or all of the fish production from at least 42 Service-operated production hatcheries and the operation of several other fish passage/screen facilities is currently directed toward specific or de facto mitigation associated with a large number of Federal water development projects. The Service proposes to conduct an intensive effort to review and describe all current FWS-implemented fishery mitigation activities, concentrating initially on fish production; establish clear definition, where it does not presently exist, of the nature and extent of the Federal responsibility through technical studies supporting negotiations with involved entities; and, through continuing assessment and evaluation activities, ensure that the intended mitigation objectives are accomplished in the most cost-effective manner. This initiative would provide the background data necessary for successful recovery of costs from the appropriate project beneficiaries or development agency.

The proposed increase of $214,000 will allow the FRP, in consultation with the HRP, to conduct a comprehensive review on a project-by-project basis of all current mitigation-related stocking and other fishery management activities; clearly identify and/or establish the Federal mitigation responsibility; develop feasible alternatives for recovery of mitigation costs from project beneficiaries; and to manage the discharge of fishery mitigation responsibilities on a continuing basis. The proposed funding would provide the capability to:

- quantify FRP mitigation requirements (i.e., hatchery production, fish passage operation, etc.) associated with existing Federal water projects through review of project legislative authorization/history, and, if necessary, participate in negotiations with concerned agencies/entities;

- coordinate FRP implementation of required mitigation on a continuing basis with other FWS programs and offices (especially the Habitat Resources Program), the development agencies and, as necessary, other entities;

- evaluate FRP mitigation implementation activities on a continuing basis to ensure that mitigation responsibilities are being fulfilled as effectively and efficiently as possible; and

- address, in a timely fashion, other mitigation issues necessitating FRP involvement.

The actual work would be undertaken through a combination of contracting (i.e., review of the legislative history of the numerous projects could be done on a contract basis) and existing staff. FTEs for the necessary Service staff time would be accommodated within total Service FTEs. Without the rigorous, quantitative assessment of mitigation implementation for which the FWS is accountable, project beneficiaries and development agencies will be reluctant--in fact, they will likely strenuously resist--Department of the Interior efforts to recover mitigation costs from the project beneficiaries or from development agencies and other entities as surrogates for beneficiaries who cannot be assessed in a cost-effective manner. Effective implementation of this "user pay" concept could ultimately result in substantial reimbursement of mitigation costs to the U.S. Treasury.

Object Class Description

The object class detail for the $214,000 increase is as follows:

Travel and transportation	$ 38,000
Rent, communications, and utilities	5,000
Other services (included contracts)	113,000
Supplies and materials	38,000
Printing	5,000
Equipment	15,000
Total	$214,000

Activity: Fishery Resources
Subactivity: Research and Development

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
Research	$	11,488	10,987	11,177	10,938	-239
	(FTE-T)	(255)	(255)	(255)	(255)	(0)
Maintenance	$	639	618	639	321	-318
	(FTE-T)	(0)	(0)	(0)	(0)	(0)
Total	$	12,127	11,605	11,816	11,259	-557
Requirements	(FTE-T)	(255)	(255)	(255)	(255)	(0)

Gramm-Rudman-Hollings Impact:

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Research	11,736	-505	11,231
Maintenance	391	-17	374

As a result of the $522 thousand P.L. 99-177 reduction, it will be necessary to defer filling position vacancies, reduce the scope of vessel operations, limit research work orders normally contracted to universities or others, avoid all but essential equipment/supply purchases, and affect further cuts in expenditures for travel. The effect will be to extend the planned dates for completion of various stock assessments, delay completion of drug registrations, and otherwise generally extend the time to completion of research work/objectives.

Authorization: 16 U.S.C. 661-666, Fish and Wildlife Coordination Act - Authorizes assistance to Federal, State, and other agencies in development, protection, rearing, and stocking of fish and wildlife and controlling losses thereof.

16 U.S.C. 742a-742j, Fish and Wildlife Act of 1956 - Directs the Secretary of the Interior to provide continuing research, extension, and information services, and to take any necessary steps to develop, manage, protect, and conserve fishery and wildlife resources, including research.

16 U.S.C. 931-939, Great Lakes Fishery Act of 1956 - Implements the Convention on Great Lakes Fisheries between the United States and Canada.

16 U.S.C. 778-778d, Fish-Rice Rotation Farming Program Act of March 15, 1958 - Authorizes the Secretary of the Interior to establish experimental stations for research and experimentation.

16 U.S.C. 2801-2810; National Aquaculture Act of 1980 - Directs the Secretary of the Interior to participate in the development of a National Aquaculture Development Plan and authorizes research, development, and other activities to encourage the development of aquaculture in the United States.

16 U.S.C. 3101, Alaska National Interest Lands Conservation Act of 1980 - Establishes 9 new and enlarges 7 existing national wildlife refuges in Alaska, and creates new units in other national conservation systems; authorizes actions to preserve and enhance the fish and wildlife resources.

Objectives:

- Provide scientific data for application in the cooperative resolution of problems associated with the use, protection, and perpetuation of freshwater and anadromous fishery resources, especially those found in international or interstate waters or waters on Service lands;

- Provide information, methodology, and materials to assist fishery managers in decisions about protection, enhancement, and utilization of the nation's fishery resources;

- Collect, collate, and interpret diverse information on fish species, populations, and habitats to address specific needs of the Service;

- As feasible, respond to the needs of other Federal agencies, Indian tribes, State agencies, international groups, and private organizations involved in fish culture.

Base Program: The Fish and Wildlife Service's mission is supported by promoting the wise use of the Nation's freshwater and anadromous fish populations and improving the management of fish and wildlife resources through greater reliance on objective scientific information. This requires a research and development function that can yield the diverse technical information required by management to address complex resource questions. Emphasis is placed on those species of fish that are anadromous or migratory, or inhabit interjurisdictional waters such as the Great Lakes. High priority is given to research and other activities aimed at restoring depleted fishery resources through more effective management of their use, and mitigating damage to the productivity of fish populations whose habitat has been altered by Federal water development projects. To fulfill the Service's fishery research objectives, it is necessary to solicit or identify information needs, develop and synthesize data in response to those needs, and present the findings in a manner useful to management. Projected outputs for the Research and Development Subactivity are:

	FY 1985	FY 1986	FY 1987
Research Projects*	88	88	86
Research Work Units*	275	275	270
Man-days of training provided	3,300	3,300	3,100
Scientific Publications	60	65	65

* Projects are major efforts with long-term objectives or highly specialized areas of investigative research. Work Units are specific shorter-term studies relating to a Project.

Fishery research concerns fall into three major categories: HABITAT, RESOURCE USE, and FISH HUSBANDRY. Objectives pertain primarily to fishery resources (1) represented by species of special Service emphasis; (2) that are environmentally impaired, depleted from overuse, or generally at risk; and (3) that are anadromous and/or inhabit transboundary or federally managed waters (e.g., national wildlife refuges, national parks, etc.).

HABITAT: This category of investigation is aimed at describing interactions of species and determining the effects of changes in their environment. Specifically, habitat investigations:

- Describe the environmental requirements for maintenance of trophic integrity in support of species of concern, determine the impact of environmental degradation on system productivity, and recommend remedial actions, where necessary, to appropriate resource management agencies.

- Develop concepts, methods, and information for predicting within major fish communities the influence of species interactions on the more valuable components thereof (e.g., the intracommunity effects of lampreys and other nuisance or exotic species, and of expanding prey or predator populations).

- Develop concepts, methods, and information for understanding impacts on fish populations resulting from alterations in water quality or from physically altered habitat.

RESOURCE USE: This category of investigation provides technical information and references for the assessment and allocation of fishery resources, including parameter estimation and population modeling. Specifically, resource use investigations:

- Identify the resource parameters and assessment needed to resolve problems in managing the rehabilitation and maintenance of transboundary fish stocks.

- Assess stocks of important fishery resources to evaluate progress toward interagency goals of restoration.

- Develop concepts, methods, and information needed to predict impacts of the selective harvest of populations (e.g., in Alaska and the Great Lakes) and long-term effects of intensive fishing on naturally reproducing stocks (e.g., stock productivity, average size of fish, etc.).

- Develop concepts, methods, and information to identify stocks, to determine their distributions, and to measure their reproductive parameters.

FISH HUSBANDRY: This category of investigation supports the propagation and culture of fishes at Service hatcheries, with spin-off application in State and private (aquaculture) sectors. Activities include research on fish production, health, genetics, carrying capacity of hatcheries, performance of stocked fish, and compliance with permit requirements of the NEPA and the National Pollution Discharge Elimination System. Specifically, husbandry investigations:

- Define quality and genetic suitability of fish propagated by Service hatcheries as measured by performance of stocked fish in the wild, and recommend stocking protocols that will increase survival and self-sustainability of hatchery fish in the wild.

- Develop concepts, methods, and information to improve propagation techniques, satisfy physiological needs of species being propagated, and to increase economic efficiency of hatcheries (e.g., improved water quality, facility design, nutrition, and increased production).

- Develop concepts, methods, and information for controlling disease organisms that significantly limit efficiency in fish production.

- Formulate, test, and register anesthetics, disinfectants, and related chemicals needed for more efficient culture of fish at national fish hatcheries.

To assist in attaining Fishery Resources Program goals and objectives, the Service operates one national fishery research center consisting of 5 satellite research laboratories, 3 other major laboratories, and 28 field stations. An intensive research effort involving 86 projects and 270 subordinate work units is scheduled for FY 1987 in the three major areas of fish husbandry, fish habitat, and resource use. The major laboratories, and areas of research emphasis, are:

- The NATIONAL FISHERIES CENTER at LEETOWN, WEST VIRGINIA, administers five laboratories involved in research on fish health, nutrition, genetics, exotic (non-native) species, cultural systems related to anadromous Atlantic salmon, striped bass, and other species; and an academy for training of fishery personnel in the latest technology of fish culture and management.

- The NATIONAL FISHERY RESEARCH LABORATORY at LACROSSE, WISCONSIN, works on the registration of drugs and chemicals required by fish culturists and fishery management biologists, and fishery ecology studies on the upper Mississippi River.

- The GREAT LAKES FISHERY LABORATORY in MICHIGAN conducts studies in all five Great Lakes on resource assessment, ecology, and impacts of contaminants on important sport and commercial fish species and their forage base. The non-budgeted increase of $498,000 in FY 1986 has been annualized in the FY 1987 base for this Laboratory.

- The SEATTLE NATIONAL FISHERY RESEARCH LABORATORY investigates factors limiting fish populations in freshwater and estuary environments, factors affecting fish health, and methods for more efficient use of hatchery reared anadromous fish to supplement free ranging populations.

- The Fish and Wildlife Service ALASKA OFFICE OF RESEARCH conducts a program of field and laboratory research on significant species of fish that occur in Alaska and investigates natural and man-induced factors that affect their populations and habitat, particularly as related to management of national wildlife refuges in Alaska.

A central fund is maintained and reallocated annually for maintenance of laboratory facilities. Project leaders identify and submit maintenance project needs. At the headquarters level, the projects are ranked on a national priority basis and available funds are allocated for the types of work described in the Fish Hatchery subactivity.

Changes For FY 1987

		FY 1987 Base	FY 1987 Estimate	Inc.(+) or Dec.(-)
Operations	$000	11,177	10,938	-239
	(FTE-T)	(255)	(255)	(0)
Maintenance	$000	639	321	-318
	(FTE-T)	(0)	(0)	(0)
Total Requirements	$000	11,816	11,259	-557
	(FTE-T)	(255)	(255)	(0)

Implementation of the Court-Ordered Great Lakes Settlement: (+$110,000/ 0 FTE):

In 1973, the United States, acting under the Secretary of the Interior's Indian trust responsibilities, initiated litigation against the State of Michigan on its own behalf and on behalf of the Bay Mills Indian Community concerning Indian fishing rights in Treaty-ceded waters of Lakes Superior, Michigan and Huron. In a ruling issued in May, 1979, the US District Court - Western District of Michigan, found that the fishing rights retained by the tribes through treaty superseded the regulatory authority of the State. Following modification by the Court of Appeals, the U.S. Supreme Court declined to accept further review of the litigation and the court ruling was accepted as final.

Following the court ruling, considerable controversy developed concerning regulation, allocation, and conservation of the fishery resources involved. Because of the normal movement of these fish populations between treaty waters and State regulated waters, they must be managed on a lake-wide basis and not solely on the basis of jurisdictional areas. The District Court retained jurisdiction in the case in order to assure proper resolution of controversies and disputes between the parties concerning management and conservation. In 1983, the three Tribes filed a motion with the District Court to allocate the fisheries resources between themselves and the State of Michigan. Trial was scheduled, but, in the interim, settlement was reached among the parties and a Consent Order was signed by the Tribes, the State of Michigan, and the Department of the Interior on April 10, 1985, approving an agreement governing the conduct of the parties in management of the concerned fisheries.

Under the terms of this agreement, the parties are each committed to provide certain assessment data on the fish stocks available for commercial harvest within Treaty-ceded waters. These assessment data are to serve as the basis for negotiation of harvest strategies and limits. The Fish and Wildlife Service, on behalf of the Department of the Interior, is to provide data on reproduction success (pre-recruit indices) of whitefish, chubs, lake trout, and forage fish. This work will be done by the Great Lakes Fishery Laboratory at Ann Arbor, Michigan. Annual costs of approximately $110,000 will be incurred for such things as vessel operations (including fuel costs), travel and per diem, and payment of overtime.

To fund this work in FY 1985, the Service redirected $75,000 surplus funds from $250,000 provided by Congress on a one-time basis for the Fish Production Needs Study. Since the Great Lakes agreement was negotiated after the FY 1986 President's Budget was submitted to Congress, no funds were specifically requested in FY 1986 for this purpose. The Service will absorb any additional costs in FY 1986 by reallocation within amounts available. An increase of $110,000 in FY 1987 will cover the annual cost of this work and preclude the need for further reallocation of funds to this additional stock assessment requirement. The necessary FTEs will be made available within the Service's total allocation.

Object Class Description

The object class description for the $110,000 increase is as follows:

Personnel Compensation (Overtime)	$ 15,000
Travel and Transportation of Persons	$ 35,000
Rent, Communications, and Utilities	5,000
Other Services	20,000
Supplies and Materials	25,000
Equipment	10,000
	$110,000

Gainesville National Fishery Research Laboratory, Gainesville, FL (-$149,000/ 0 FTE):

The Gainesville National Fishery Research Laboratory was established to identify exotic (non-native) fish species introduced into waters of the United States and to evaluate the impact on endemic (native) fishes as these exotic species established reproducing populations and expanded their ranges. In addition, the Gainesville Laboratory has the capability to conduct needed research on the non-salmonid anadromous resources of the south Atlantic and eastern Gulf coasts. The laboratory has a key national role in restoration of these resources through research based on a total stock concept and by serving as a repository for data and information available to and from the various State fishery agencies.

The FY 1986 appropriation provides funds to continue assessments to establish the current status of the exotic stocks and to detect and monitor future changes in those stocks; to continue life history studies to more adequately document the life cycle, range, and biological requirements of the exotic species; and to identify and investigate environmental and other factors affecting the exotic populations and develop recommendations for remedying negative influences. This work will be accomplished through a combination of in-house capability and contracting with appropriate agencies/entities for specific studies.

An unbudgeted increase in FY 1986 of $149,000, provided to facilitate accomplishment of the laboratory mission, will be used for one-time purchase of laboratory and field equipment essential to initiate and continue research assessments. Current research projects will not be adversely impacted by the termination of the FY 1986 add-on.

Object Class Description

The object class description for the $149,000 decrease is as follows:

Equipment	$-149,000
	$-149,000

Termination of Aquaculture Demonstration Activities at the Experimental Hatchery, National Fisheries Center, Leetown, WV (-$200,000/ 0 FTE):

Research and development activities conducted by the Service at the National Fisheries Center (NFC) include the operation of an experimental hatchery for the development, testing, improvement, and demonstration of aquaculture techniques and procedures. Also, the hatchery produces a limited number of fish for experimental use by the Fish Health Laboratory at the NFC and to maintain a put-and-take fishing area at the NFC for use by handicapped individuals.

In response to the Federal budget situation and the need to reduce Federal expenditures, the Service reviewed its fishery research activities to identify lower priority activities that could be terminated with minimal impact on primary resource responsibilities. The experimental hatchery is not critical to the direct resource management related research needs of the Service. Therefore, the Service proposes to terminate operation of the experimental hatchery to reduce operations costs at the Leetown NFC by $200,000. The hatchery is presently being operated at a minimal level and on-going activities can be terminated without severe adverse program impacts on the NFC. Fish needed in the future for experimental purposes at the Fish Health Laboratory and to maintain the handicapped fishing area can be supplied from other units of the National Fish Hatchery System. All Service personnel presently assigned to the hatchery would be reassigned to other Service stations or activities, so no FTE reduction is incorporated in this action.

Object Class Description

The object class description for the $200,000 decrease is as follows:

Personnel compensation (overtime)	-$5,000
Travel and Transportation of Persons	-5,000
Rent, Communications, and Utilities	-45,000
Other Services	-60,000
Supplies and Materials	-50,000
Equipment	-35,000
	-$200,000

Fishery Research Maintenance and Equipment Replacement (-$248,000/ 0 FTE):

In FY 1986, an increase of $248,000 was appropriated for general operation and maintenance. The funds will be used to offset deferred maintenance and equipment replacement needs. This will help ensure better long-term utilization of existing facilities and equipment. Needs to be addressed include: vessel haul-out and repair to meet U.S. Coast Guard safety requirements; installation of waste treatment facilities to meet discharge standards; repair of facilities to protect existing buildings from accelerated deterioration; and replacement of obsolete or provision of emergency backup equipment needed for support of research. Termination of the funding will not adversely affect the ability of the laboratories to maintain current research activities in FY 1987.

Object Class Description

The object class description for the $248,000 decrease is as follows:

Other Services	$-125,000
Supplies and Materials	- 90,000
Equipment	- 33,000
	$-248,000

Equipment Purchases at the Wellsboro National Fishery Research and Development Laboratory, PA: (-$70,000/ 0 FTE)

The Wellsboro National Fishery Research and Development Laboratory (NFRDL) has been involved for several years in research on the effects of acid precipitation. Recently, the EPA recommended specific, sensitive analysis methodology so that acid precipitation monitoring and research can be compared on a nationwide basis. In FY 1986, Congress appropriated an unbudgeted increase of $70,000 for the Wellsboro NFRDL to purchase equipment to carry-out the EPA recommended methodologies. Wellsboro NFRDL acid precipitation data can now be directly compared to those of other researchers and Wellsboro serves as a central analytical facility to provide checks on other Service acid precipitation projects on a random basis.

Since purchase of this equipment is a one-time action, this proposal terminates the funding provided for this purpose. Termination of this funding will not adversely affect the ability of the Wellsboro Laboratory to meet its research responsibilities.

Object Class Description

The object class description for the $70,000 decrease is as follows:

Equipment	-$70,000
	-$70,000

Justification of Program and Performance

Activity: Endangered Species

(Dollar Amounts in Thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Listing	($)	3,210	3,071	3,186	2,937	-249
	(FTE-Total)	(58)	(58)	(58)	(58)	(0)
Law Enforcement and Protection	($)	8,648	8,276	8,433	7,240	-1,193
	(FTE-Total)	(156)	(156)	(156)	(156)	(0)
Consultation	($)	2,614	2,502	2,588	2,588	0
	(FTE-Total)	(74)	(74)	(74)	(74)	(0)
Recovery	($)	6,884	6,588	6,784	6,030	-754
	(FTE-Total)	(59)	(59)	(59)	(59)	(0)
Research and Development	($)	4,545	4,350	4,513	4,365	-148
	(FTE-Total)	(65)	(65)	(65)	(65)	(0)
Cooperation with States	($)	4,393	4,204	4,393	0	-4,393
	(FTE-Total)	(0)	(0)	(0)	(0)	(0)
Total Requirements	($)	30,294	28,991	29,897	23,160	-6,737
	(FTE-Total)	(412)	(412)	(412)	(412)	(0)

Authorization: 16 U.S.C. 1531-1543, Endangered Species Act of 1973, as amended. Authority under this Act expired September 30, 1985. The FY 1986 Continuing Resolution extended reauthorization of the Act through the end of the year.

16 U.S.C. 1361-1362, 1372-1384, 1401-1407, Marine Mammal Protection Act of 1972, as amended.

Activity Summary: The FY 1987 Budget Request for the Endangered Species Program totals $23,160,000. This level of funding will support activities in Listing, Law Enforcement, Consultation, Recovery, and Research. Most additions to the FY 1986 budget are not continued, as they were designed to accomplish specific objectives which are expected to be attained by the end of the year. As a result, continuation of these funding levels is not requested for FY 1987. For listed marine mammals, base funding totals $1,220,500 within the total budget request, with $278,000 in Recovery, $133,000 in Law Enforcement and Protection, and $809,500 in Research and Development.

Activity: Endangered Species
Subactivity: Listing

(Dollar Amounts in Thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Listing	($)	3,210	3,071	3,186	2,937	-249
	(FTE-Total)	(58)	(58)	(58)	(58)	(0)

Gramm-Rudman-Hollings Impact:

		FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
Listing	($)	3,210	-139	3,071

Application of P.L. 99-177 to the total Listing appropriation will reduce funding for status surveys by $139,000. Using the established listing priority system to rank this nationwide pending work, an estimated 18 lower priority surveys (of approximately 50 scheduled) covering 49 candidate species will not be carried out.

Authorization: 16 U.S.C. 1531-1543, Endangered Species Act of 1973, as amended.

Objectives: To identify candidate species for listing through the conduct of status surveys, and provide public notice of planned listing activities by means of consolidated notices of review. To establish priorities among identified candidate species, and complete regulatory actions for those most in need of legal protection. To conduct required 5-year reviews of listed species, and assess the need for reclassifications or delistings to reflect changes in each species' status.

Base Program: Listing species of animals and plants is the initial step in the Endangered Species Program, since species must be listed to benefit from the protections provided under the Act. Delisting or reclassification actions are also essential to maintain a credible list. To date, 885 species have been separately listed (including 389 native species), of which 765 are Endangered (307 native), and 120 are Threatened (82 native). As of December 1985, another 58 species are proposed for listing. In addition, over 3,800 species are formally recognized as candidates for potential listing; these are being identified in three comprehensive Notices of Review maintained by the Service for plant, invertebrate, and vertebrate species. From this pool of candidates, species are selected for listing using the priority guidelines published in the Federal Register (September 21, 1983). Degree and immediacy of threat and taxonomic uniqueness are the primary criteria used in assessing listing priorities.

There are presently more than 1,100 U.S. species that are known to warrant listing as threatened or endangered. An additional 2,700 U.S. species have been identified that may warrant listing, but sufficient information is not presently available to make those determinations. By maintaining a constant flow of information on candidate species from the evaluation stage through proposal and final listing, this subactivity can proceed at a reasonable and sustainable pace to address the candidates awaiting listing. At the FY 1987 requested level of funding, the Service will be capable of identifying and formally listing members of ecosystems that are endangered with extinction.

These funds will allow continued progress in reducing the backlog of candidate species now awaiting determination of listing eligibility. Application of the Program's listing priority system will ensure that those species facing the greatest degree of threat will be proposed for listing first. The major workload accomplishments anticipated for this subactivity are:

	1985	1986	1987
Species proposed for listing, reclassification, or delisting	67	73	73
Species listed, reclassified, or delisted	66	63	63

Decrease for FY 1987:		FY 1987 Base	FY 1987 Estimate	Decrease
Listing	($)	3,106	2,857	-249

The additional listing funds provided in FY 1986 will be used to expand the number of status surveys conducted for candidate species (as the number of species included in a survey varies considerably, no accurate projection can now be made; however, the present estimate is 13 surveys for 19 species, using the listing priority system). Information gathered through these contractual efforts will be utilized in future years to ascertain whether those surveyed species are eligible for listing. For those that are, the data will be included in the subsequent preparation of formal listing packages. Given the existing number of species previously determined to be eligible for listing (more than 1,100 species that have already been surveyed and now awaiting development of formal listing packages), and the current base of $[illegible] requested for status survey work, continuation of $249,000 in FY 1987 is not requested.

Object Classification of Changes

The object class detail for the $249,000 decrease is as follows:

Other Services	-$249,000
Total	-$249,000

Activity: Endangered Species
Subactivity: Law Enforcement and Protection

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Law Enforcement	($)	7,784	7,449	7,579	6,436	-1,143
	(FTE-Total)	(132)	(132)	(132)	(132)	(0)
Wildlife Permit	($)	864	827	854	804	-50
Administration	(FTE-Total)	(24)	(24)	(24)	(24)	(0)
Total	($)	8,648	8,276	8,433	7,240	-1,193
Requirements	(FTE-Total)	(156)	(156)	(156)	(156)	(0)

Graham-Rudman-Hollings Impact:

		FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
Law Enforcement and Protection	($)	8,648	-372	8,276

As a result of P.L. 99-177, total funding for the Law Enforcement and Protection subactivity will be reduced by $372,000. Agent travel associated with investigating wildlife violations will be reduced by $112,000, while funding available to support undercover operations will be $89,000 less. Port inspection operations will be reduced by $87,000, but this impact will be mitigated by the anticipated collection of user fees. Equipment purchases of $47,000 for the new forensics lab will be deferred. Without $37,000, the Wildlife Permit Office will delay the filling of current staff vacancies.

Authorization: 16 U.S.C. 1531-1543, Endangered Species Act of 1973, as amended.

16 U.S.C. 1361-1362, 1372-1384, 1401-1407, Marine Mammal Protection Act of 1972, as amended.

LAW ENFORCEMENT

Objectives: To provide intensive protection to species highly vulnerable to human take. To investigate violations, including the investigation of major commercial interests involved in illegal trade in endangered wildlife products. To monitor and clear wildlife shipments at ports-of-entry.

Base Program: The Service provides protection for a broad spectrum of fish, wildlife, and plants through application of the full range of law enforcement techniques, including: 1) surveillance of areas of concentration of priority endangered and threatened wildlife and fishery resources to prevent taking; 2) inspection of shipments arriving at and departing from designated, border, and special ports-of-entry; 3) investigation of known and suspected violations; 4) promulgation of information about and enforcement of Federal regulations concerning human interaction with endangered and threatened species; and 5) submission of alleged violations of the law for assessment of civil penalties, or to the Department of Justice for criminal prosecution. The workload measures anticipated for this program element are:

	1985	1986	1987
Wildlife shipments monitored	60,000	66,000	66,000
Wildlife shipments physically inspected	22,000	24,000	24,000
Law enforcement investigations	3,500	4,000	4,000

The FY 1987 law enforcement emphasis is to continue to undertake major investigations of illegal commercial trade activities and other major violations of the Endangered Species Act. The first priority is to prevent violations involving highly vulnerable species before they occur, then to pursue investigations of known or suspected violations. The Service will continue to concentrate law enforcement resources on those species that are particularly vulnerable to human take, such as the grizzly bear, manatee, and sea otter.

The purpose of the inspection program is to reduce the illegal import/export traffic in protected species and their products through seizure of illegal wildlife products at ports-of-entry and prosecution of violators. In response to Congressional direction, the Service added 20 Wildlife Inspectors (including two for Chicago and one for Atlanta) in FY 1985 to augment the former contingent of 36 inspectors. (An additional agent position was also added in Puerto Rico, for a total of three Service Law Enforcement professionals working there.) This workforce of 56 will be maintained in both FYs 1986 and 1987, to continue to provide expanded inspection coverage at both designated and non-designated ports-of-entry.

Decrease for FY 1987:		FY 1987 Base	FY 1987 Estimate	Decrease
Forensics Lab	($)	1,233	140	-1,093
Caribbean Activities	($)	218	168	-50
Total	($)	1,451	308	-1,143

Additional funds were provided in FY 1986 for the establishment and initial operation of a forensics lab for the Service. At the present time, the site for this facility is undecided. The added funds are expected to be sufficient for starting up the physical plant, procuring needed supplies and equipment, and hiring core personnel. The Service has provided 6 FTEs in anticipation of beginning operations this year. With these start-up costs occurring in FY 1986, the Service estimates that approximately $400,000 will be needed in FY 1987 to maintain this core forensics staff and lab operations. These funds will accrue from the user fees charged for import/export inspections at ports-of-entry, a legitimate use of these funds since this lab will support all port investigations of monitored wildlife shipments. Fees collected above this total will be utilized to supplement the Service's port operations and other protection actions. User fee collections are scheduled to begin in February, and the full-year amount to be collected in FY 1987 is expected to support both the lab and the port operations. As a result, continuation of last year's funding is not requested in FY 1987.

In the Caribbean, the Service will utilize the additional FY 1986 funding to conduct an intensive education campaign to alert dove and pigeon hunters about recognizing and avoiding the endangered Puerto Rican plain pigeon. Anticipating a successful campaign in FY 1986, the continuation of this activity in future years can be accomplished without the need for additional appropriated funds.

Object Classification of Changes

The object class detail for the $1,143,000 decrease is as follows:

Personnel Compensation	-$250,000
Personnel Benefits	-25,000
Travel and Transportation of Persons	-23,000
Transportation of Things	-20,000
Communications, Utilities, and Other Rent	-195,000
Other Services	-200,000
Supplies and Materials	-130,000
Equipment	-300,000
Total	-$1,143,000

WILDLIFE PERMIT ADMINISTRATION

Objectives: To perform Management Authority functions under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). To issue wildlife and plant permits in a timely manner with minimum burden on the public.

Base Program: The Federal Wildlife Permit Office acts to control international trade and activities conducted by various Federal agencies and private individuals through the issuance of permits and administration of CITES, thereby promoting the conservation, enhancement, and survival of listed species. On the average, permit applications for the taking, importation/exportation, or transportation in interstate commerce of species protected by the Endangered Species Act or CITES were reviewed and acted upon by the Wildlife Permit Office within 61 or 31 days, respectively. This average permit processing time will be maintained at the current level, in spite of a ten percent increase in permit application review workload, primarily through automation of processing procedures. The anticipated processing workload for new permits is shown below:

	1985	1986	1987
Permit applications reviewed	3,600	4,000	4,500

Decrease for FY 1987:		FY 1987 Base	FY 1987 Estimate	Decrease
CITES Permit Processing	($)	578	528	-50

In FY 1986, additional funds were provided to improve the processing of CITES permits. This money will be used to purchase new equipment to improve recordkeeping and file retrieval, as well as other equipment to expand the automation of office operations. Finally, funds will also be used for training of office staff on both existing and new equipment. As all these actions are of a one-time nature and productivity will be enhanced, the additional $50,000 is not needed again in FY 1987, and continuation is not requested.

Object Classification of Changes

The object class detail for the $50,000 decrease is as follows:

Other Services	-$20,000
Equipment	-30,000
Total	-$50,000

Activity: Endangered Species
Subactivity: Consultation

(Dollar Amounts in Thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Consultation	($)	2,614	2,502	2,588	2,588	0
	(FTE-Total)	(74)	(74)	(74)	(74)	(0)

Gramm-Rudman-Hollings Impact:

		FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
Consultation	($)	2,614	-112	2,502

In the Consultation subactivity, the P.L. 99-177 reduction totals $112,000, with the result being curtailment or elimination of on-site reviews of proposed project impacts on listed species, and postponement of or restricted attendance at a Section 7 training workshop scheduled for FY 1986.

Authorization: 16 U.S.C. 1531-1543, Endangered Species Act of 1973, as amended. Section 7 of the Act reads in part: "Each Federal agency shall, in consultation with and with the assistance of the Secretary [of the Interior], insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary ... to be critical, unless such agency has been granted an exemption for such action ...."

Objectives: To issue accurate and timely Biological Opinions to other Federal agencies. To emphasize the identification and informal resolution of potential conflicts in the early project planning stages. To expedite consultations on energy- and mineral-related projects.

Base Program: The Service assists other Federal agencies in meeting their Section 7 responsibilities through formal and informal consultations. Through informal consultations, the Service provides information and assistance to Federal agencies and permit and license applicants prior to receiving written requests for formal Section 7 consultations. By entering into informal consultation early in the project planning stages, the need to enter into formal consultation may be removed, thus fulfilling Section 7 responsibilities earlier and in a cost-effective manner. However, if a potential impact on a listed species cannot be resolved informally, formal consultation must be initiated. Formal consultations result in written Biological Opinions on the effects of proposed agency actions on listed species. If a "jeopardy" opinion is issued, it must identify reasonable and prudent alternatives to the project which will avoid the adverse impact.

As shown below, the workload factors anticipated under this subactivity reflect the Service's continuing emphasis on informal consultations conducted during the early project planning stages:

	1985	1986	1987
Formal Consultations conducted	408	350	300
Informal Consultations conducted	8,860	11,400	14,800

Activity: Endangered Species
Subactivity: Recovery

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Planning and Coordination	($) (FTE-Total)	2,169 (31)	2,076 (31)	2,069 (31)	2,069 (31)	0 (0)
Refuge Operations and Maintenance	($) (FTE-Total)	994 (5)	951 (5)	994 (5)	722 (5)	-272 (0)
Hatchery Operations and Maintenance	($) (FTE-Total)	163 (3)	156 (3)	163 (3)	163 (3)	0 (0)
Management (Off-Service Lands)	($) (FTE-Total)	3,558 (20)	3,405 (20)	3,558 (20)	3,076 (20)	-482 (0)
Total Requirements	($) (FTE-Total)	6,884 (59)	6,588 (59)	6,784 (59)	6,030 (59)	-754 (0)

Gramm-Rudman-Hollings Impact:

		FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
Recovery	($)	6,884	-296	6,588

Recovery subactivity reductions due to P.L. 99-177 total $296,000. Final development of approximately 70 recovery plans will be delayed, and travel for coordination of field actions will be reduced, as the Planning and Coordination element is reduced by $93,000. Implementation of recovery actions will be reduced for listed species on Refuges ($37,000), Hatcheries ($8,000), and Off-Service Lands ($158,000). At this time, the projected impact of these reductions will delay 29 (of an estimated 150) recovery actions for 25 species.

Authorization: 16 U.S.C. 1531-1543, Endangered Species Act of 1973, as amended.

16 U.S.C. 1361-1362, 1372-1384, 1401-1407, Marine Mammal Protection Act of 1972, as amended.

PLANNING AND COORDINATION

Objectives: To continue the development and update of recovery plans for listed species. To coordinate the implementation of recovery plans, including protecting habitat necessary for conservation and recovery of listed species.

Base Program: Recovery planning is the process by which species information and management needs are identified and ranked in terms of importance and timing. These plans are comprehensive in that they identify all necessary recovery actions for a species. For example, habitat protection may be identified as a recovery action. Beyond fee acquisition of the habitat, examples of other recovery measures to protect habitat include installing gates on maternity and hibernating caves inhabited by four listed species of bats, construction and maintenance of nesting boxes and hacking sites for various listed birds, and fencing to eliminate animal grazing on listed plants.

Draft recovery plans are reviewed by all interested parties. This non-Service input is incorporated into the approved recovery plan, as appropriate, to enhance interagency cooperation in effecting the species' survival and eventual recovery. The commenting agencies and organizations are also encouraged to undertake some recovery tasks, thus providing a coordinated strategy of Federal, State, and private entities in implementing recovery plans. By the end of FY 1987, 275 of the 389 currently-listed domestic species are projected to have approved recovery plans.

The table below shows the number of species for which at least a draft plan has been prepared; species with recovery plans approved are also included. The second factor indicates the number of species with approved plans as opposed to plans being developed. These are cumulative totals and the result of recent emphasis placed on the development of recovery plans for listed species.

	1985	1986	1987
Species with recovery plans developed	323	335	375
Species with recovery plans approved	223	235	275

REFUGE OPERATIONS AND MAINTENANCE

Objective: To provide increased protection and conduct management actions for all listed species residing on National Wildlife Refuge lands.

Base Program: Over 280 National Wildlife Refuges provide protection to an estimated 70 listed species, approximately 25 percent of all native listed species. Species found on Service lands are not always actively managed, but they receive basic protection from disturbance and taking. In some cases, refuges established for other purposes host listed species some time during the year. Some of these refuges have come to serve as critical support elements for endangered species, such as Texas' Aransas National Wildlife Refuge does for the whooping crane. Examples of species management actions taking place on Service lands are as follows:

Species	Action	Refuge	Project Funding
Mississippi sandhill crane	Release and monitor captive-reared cranes produced at Patuxent Lab; and rehabilitate savannah habitat.	Mississippi Sandhill Crane NWR, MS	$20,000
Aleutian Canada goose	Protect nesting and migrating geese; transplant geese to enhance population; expand predator removal efforts; and conduct surveys of release sites.	Aleutian Islands NWR, AK	526,000
Masked bobwhite	Conduct census and habitat monitoring work, in conjunction with reintroduction of captive-reared birds.	Buenos Aires Ranch NWR, AZ	18,000
Bald eagle	Protect nesting and wintering habitat to enhance production and survival.	Ottawa NWR, OH; Upper Mississippi NWR, WI; Agassiz and Tamarac NWRs, MN; Blackwater NWR, MD	4,500
Whooping crane	Provide supplementary food and predator control; perform weekly census; conduct behavioral and mortality studies; and intensify habitat manipulation and enhancement.	Aransas NWR, TX; Gray's Lake NWR, ID	148,000

Decrease for FY 1987:		FY 1987 Base	FY 1987 Estimate	Decrease
Aleutian Canada Goose	($)	526	378	-148
Hawaiian Forestbirds	($)	74	0	-74
Whooping Crane	($)	148	98	-50
Total	($)	748	476	-272

The additional funds provided in FY 1986 will support the initiation of Arctic fox removal on Kiska Island in the Aleutian Islands NWR. Eradication of this introduced mammalian predator from this island through planned use of Compound 1080 will allow the reintroduction of the Aleutian Canada goose to its historical breeding grounds. Following the dropping of bait via helicopter in the winters of both FY 1986 and 1987, subsequent Service actions beginning in FY 1987 will concentrate on monitoring the effects of the chemical on the foxes and avian wildlife inhabiting the island. Since most of the workload and costs will decrease in FY 1987, only $100,000 of the prior year's additional funding is needed. Therefore, the Service is not requesting continuation of $148,000 in FY 1987.

On the newly-acquired Upper Hakalau NWR, additional funds provided in FY 1986 (plus $75,000 re-directed from lower-priority Service recovery actions) will finance the fencing of this Hawaiian rain forest habitat. In addition, a plan to remove feral pigs from this habitat will also be developed. With completion of both tasks anticipated by the end of the year, continuation of these funds is not needed in FY 1987. Implementation of the feral pig removal plan can be accommodated within the requested funding level for recovery management of Hawaiian forestbirds.

Additional funding was provided in FY 1986 to initiate a study of whooping crane behavior, particularly those factors determining pair bonding on both wintering and nesting grounds. As data collection and analysis should be completed by the end of this year, the Service is not requesting continuation of $50,000 in FY 1987. Data gathered from this one-year study will be utilized at a later date, as the need arises for such behavioral information. In addition, the Service was directed to devote an additional $50,000 of FY 1986 base funds toward whooping crane recovery. These funds, taken from lower-priority recovery projects, will be used in FY 1986 and 1987 for a study on reducing or controlling mortality factors (such as fences, powerlines, predators, infertile eggs, etc.) that impact whooping crane flocks.

Object Classification of Changes

The object class detail for the $272,000 decrease is as follows:

Transportation of Things	-$25,000
Other Services	-223,000
Supplies and Materials	-24,000
Total	-$272,000

HATCHERY OPERATIONS AND MAINTENANCE

Objective: To provide protection for endangered fish species by maintaining temporary habitat within the National Fish Hatchery System.

Base Program: Base funds will support recovery actions at Dexter National Fish Hatchery in New Mexico, where several endangered fish species of the southwestern U.S. are being held (such as the bonytail chub, humpback chub, and Comanche Springs pupfish). Efforts will concentrate on the propagation of captive stock of these species, with improved production leading to reintroduction into the wild. Besides providing temporary refuge for these fish, recovery actions include refining techniques for propagation, rearing, and release.

MANAGEMENT (OFF-SERVICE LANDS)

Objective: To conduct management actions on behalf of listed species residing off Service lands, to promote their recovery and subsequent removal from the list.

Base Program: Recovery actions conducted off Service lands include species monitoring, relocation, propagation and release, reintroduction, and controlling predators and competition. It is important, therefore, that priority recovery actions be implemented as soon as possible after being identified in order to prevent further jeopardy to the species. Additional funding was appropriated in FY 1986 for Upper Colorado River studies, and as directed, the Service has earmarked another $100,000 toward these efforts. These funds will support recovery actions for three listed fish inhabiting the Upper Colorado River Basin, including monitoring fish populations for water and temperature requirements, and implementation of computer-based models for water usage, temperature, and habitat. Funding to continue these efforts in FY 1987 is included in the budget request. Other examples of recovery actions taking place off Service lands are as follows:

Species	Action	Project Funding
Bald eagle	Continue to negotiate and administer bald eagle nest tree agreements with private landowners in New England; conduct nesting surveys and banding of eaglets, to enhance reproduction and survival to meet recovery goals; and conduct ecological studies on Arizona breeding population.	$38,000
Peregrine falcon	Coordinate falcon releases for re-establishment via potential aerie evaluation, State and Federal cooperation, and permit review. This will guard against duplication of effort and provide guidance for re-establishment in high priority areas to meet recovery goals.	412,000
Grizzly bear	Conduct studies and monitor population status and trends in the Yellowstone, Cabinet-Yaak, and Northern Continental Divide Ecosystems.	225,000
Kirtland's warbler	Control cowbirds and evaluate effects of cowbird removal from warbler nesting areas; and in cooperation with the Forest Service and State of Michigan, improve habitat for and prevent disturbance of nesting warblers.	51,000
Sea turtles (6 species)	Develop management plans, guidelines, and information mation needs, and provide protection for turtles on nesting beaches in the southeastern U.S., and in Micronesia and Central America, in cooperation with NMFS; develop age determination methodology, tags, and tag registry for East Pacific (South and Central American) turtles; and computerize worldwide living tag registry.	187,000

Decrease for FY 1987:		FY 1987 Base	FY 1987 Estimate	Decrease
California Condor	($)	298	0	-298
Peregrine Falcon	($)	269	120	-149
Grizzly Bear	($)	200	175	-25
California Brown Pelican	($)	20	10	-10
Total	($)	787	305	-482

The additional recovery funds provided in FY 1986 for the California condor will support studies on limiting factors, and radio monitoring and tracking of the remaining five birds in the wild. Several research projects now being done in FY 1986 will be completed, such that the added recovery funding need not be continued in FY 1987. These research actions include telemetry development, surrogate breeding work on Andean condors (since 21 California condors are now in captivity), analysis for environmental contaminants on condor parts, and additional capture of wild birds. The Service believes that the $790,900 requested in FY 1987 for California condor recovery and research is sufficient to continue on both the wild birds and the captive flock, and that continuation of the additional $298,000 is not needed.

The Service was again provided additional funding in FY 1986 to continue its contract work with The Peregrine Fund. These funds, together with $149,000 taken from sea turtle recovery projects for FY 1986 only, will allow acceleration of captive falcon propagation at the Fund's Boise facility. However, the Service believes that the Fund will continue to receive substantial contributions from private individuals and non-Service entities, such that maintaining the FY 1986 level of funding support is of lower priority, especially in light of the $120,000 requested in FY 1987 for peregrine falcon recovery (including $46,000 for the Fund). Given the above, the Service is not requesting continuation of the added FY 1986 funding.

Extension of current studies on quantifying the effects of backcountry recreation, road access for timber harvesting, and other associated human activities on grizzly bear behavior in Montana and Wyoming will be supported by the additional FY 1986 funding (and $25,000 taken from other lower-priority recovery projects for FY 1986 only). These studies are expected to be completed by the end of the year, with final reports financed from the $175,000 in grizzly bear recovery funds requested in the FY 1987 budget. As a result, continuation of the additional $25,000 is not requested.

Additional funds provided in FY 1986 (and augmented by the Service) will support the monitoring of California brown pelican breeding success. This bird had been experiencing low reproductive rates due to DDT contamination in its habitat. With this problem now decreasing in severity, delisting is anticipated within the near future. The Service believes it can continue to monitor the nesting and roosting sites in FY 1987 by utilizing funds from other recovery actions scheduled for completion this year. Therefore, the additional $10,000 for this bird is not requested to be maintained in FY 1987.

Object Classification of Changes

The object class detail for the $482,000 decrease is as follows:

Travel and Transportation of Persons	-$5,000
Transportation of Things	-5,000
Other Services	-434,000
Supplies and Materials	-15,000
Equipment	-23,000
Total	-$482,000

Activity: Endangered Species
Subactivity: Research and Development

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Research	($)	3,660	3,503	3,628	3,480	-148
	(FTE-Total)	(57)	(57)	(57)	(0)	(0)
Planning and Coordination	($)	885	847	885	885	0
	(FTE-Total)	(8)	(8)	(8)	(0)	(0)
Total Requirements	($)	4,545	4,350	4,513	4,365	-148
	(FTE-Total)	(65)	(65)	(65)	(0)	(0)

Gramm-Rudman-Hollings Impact:

		FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
Research and Development	($)	4,545	-195	4,350

As a result of P.L. 99-177, Research subactivity reductions total $195,000. Overall administration, the Planning and Coordination element, will be reduced by $38,000, primarily in travel associated with coordinating the Service's nationwide complex of labs and cooperative units now involved with research on endangered species. Research reductions at these centers will total $157,000, as an estimated four projects for three species are delayed.

Authorization: 16 U.S.C. 1531-1543, Endangered Species Act of 1973, as amended.

16 U.S.C. 1361-1362, 1372-1384, 1401-1407, Marine Mammal Protection Act of 1972, as amended.

RESEARCH

Objectives: To identify and evaluate environmental and biological factors that limit endangered species populations. To augment or establish wild populations by introducing stock produced through captive propagation. To develop, improve, or refine management procedures that enhance the survival of endangered species.

Base Program: Research is conducted to develop the tools and techniques to more effectively manage listed species. Research investigations use both Service expertise and contractors to conduct: 1) in-depth studies of individual species or groups of species within a given ecosystem, 2) habitat evaluations, 3) identification of limiting factors, and 4) other actions identified in recovery plans as essential to species recovery, such as captive propagation. As directed, the Service has budgeted $80,000 in FY 1986 for the Florida panther, to support studies on population status, habitat utilization and prey base data, and captive propagation and reintroduction. Other examples of endangered species research conducted in FY 1986 include the following:

Species	Action	Project Funding
California condor	Determine breeding chronology and evaluate limiting factors through continued radio telemetry tracking of	$790,900

	marked condors; expand captive flock for propagation purposes; evaluate strategies for release of captive-hatched condors; increase habitat evaluation, field surveillance, and environmental contaminant evaluation; and continue work on surrogate Andean condors to improve captive breeding, husbandry, fostering, and parental behavior methodologies.	
West Indian manatee	Monitor status and population dynamics, and determine movement patterns in areas of high concentration in Florida; search for pathological problems; study food habits; and monitor status of aquatic vegetation.	263,200
Puerto Rican parrot	Rear parrots in captivity to bolster wild populations and increase captive breeding stock; and investigate breeding biology, productivity, ecology, and causes of juvenile mortality. In addition, the Service has directed an additional $110,000 in FY 1986 to support the establishment of an aviary in Rio Abajo for holding and propagating a captive flock, prior to reintroducing the parrots into the wild.	328,100
Whooping crane	Improve rearing and release techniques, and produce cranes in captivity to supplement existing wild populations or develop a third flock; perform site studies for establishing such a third flock, including whether or not it should also be migratory like the existing two flocks (Canada/Texas and Idaho/New Mexico).	308,800
Woodland caribou	Investigate early winter habitat, calf mortality, and genetics of the Selkirk Mountain woodland caribou herd, and explore transplants to augment woodland caribou herds.	174,000
Gray wolf	Study captive wolves to examine behavior and productivity in relation to population density, physiology, and physical condition by methods which cannot be duplicated in the wild.	181,700
Southern sea otter	Evaluate mortality factors, abundance, foraging patterns, and life history data in California; study biological considerations in translocations and interactions with their habitat; and monitor movements, home range, and territorial behavior of tagged otters.	542,300

Decrease for FY 1987:		FY 1987 Base	FY 1987 Estimate	Decrease
Black-footed Ferret	($)	265	216	-49
Whooping Crane	($)	313	214	-99
Total	($)	578	430	-148

Most of the additional funding in FY 1986 will support establishment of a captive propagation facility in Wyoming for the endangered black-footed ferret. Other research activities scheduled in FY 1986 will also be expanded by these funds, including initiating the development of release/reintroduction techniques and refining techniques for locating additional ferret colonies. As the propagation facility will be be operational by the end of the year, $100,000 will be needed to continue the other actions described above. Therefore, the Service is not requesting continuation of $49,000 for ferret research in FY 1987.

The additional FY 1986 funding for whooping crane research will be used to intensify ongoing studies on the feasibility of establishing a third flock of cranes. Obligation of these funds in FY 1986 will allow for completion of this contracted research effort by the end of FY 1987. Depending upon the results of this work (i.e., whether formation of an experimental third flock is feasible, its location and migratory vs. resident nature, etc.), the Service will then evaluate the need for any further funding in the future. At the present time, however, no expanded funding is required in FY 1987 for this research project, and continuation of the additional FY 1986 funds for the whooping crane is not requested.

Object Classification of Changes

The object class detail for the $148,000 decrease is as follows:

Other Services	-$148,000
Total	-$148,000

PLANNING AND COORDINATION

Objectives: To administer, coordinate, plan, and direct the various endangered species research and propagation activities identified in recovery plans. To maintain continued operation of research labs and facilities at levels sufficient to promote successful efforts on recovery actions.

Base Program: Base funding for this program element supports the staff in Washington that directs the endangered species research effort nationwide, as well as the core personnel in the main research labs. The main wildlife and fish research facilities engaged in endangered species research in FY 1986 are in Patuxent, MD, Seattle, WA, Madison, WI, LaCrosse, WI, and Denver, CO. The labs and field stations conducting research studies and operations on listed species may vary from year to year, depending upon the species under study, the nature and duration of the work involved, and the expertise available in each research facility.

Activity: Endangered Species
Subactivity: Cooperation with States

(Dollar Amounts in Thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Cooperation	($)	4,393	4,204	4,393	0	-4,393
with States	(FTE-Total)	(0)	(0)	(0)	(0)	(0)

Gramm-Rudman-Hollings Impact:

		FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
Cooperation with States	($)	4,393	-189	4,204

Within the Cooperation with States subactivity, a total of $189,000 will be reduced due to P.L. 99-177. The estimated impact of this total reduction will be the elimination of 12 proposed State projects (of approximately 165 projects) in FY 1986 for 20 listed species.

Authorization: 16 U.S.C. 1531-1543, Endangered Species Act of 1973, as amended.

16 U.S.C. 1361-1362, 1372-1384, 1401-1407, Marine Mammal Protection Act of 1972, as amended.

Objective: To assist the States in initiating their own programs for the conservation of Endangered and Threatened species.

Base Program: Section 6 of the Endangered Species Act recognizes that the States have an important role in the development and maintenance of substantive programs for the conservation of Endangered and Threatened species. The purpose of Section 6 is to encourage States to enter into cooperative agreements with the Service, and to provide funds to those States to assist them in initiating endangered species conservation programs. Additional funding was provided in FY 1986 for this purpose. To date, implementation of Section 6 has been successful, with a total of 44 States and territories having entered into cooperative agreements with the Service. Funds are provided on a 75/25 percent Federal/State cost sharing basis; if more than one State cooperates on the same species, the Federal share increases to 90 percent. A major benefit of this State program is the implementation of recovery activities for Federally-listed species without an increase in Federal personnel ceilings.

Projects continued in FY 1986 include black-footed ferret studies and protection; grizzly bear studies (as a cooperative venture among several States); sea otter mortality studies; Kirtland's warbler management; bald eagle and peregrine falcon releases; Colorado River fish life history and movement studies; and gray wolf surveys. With the expanded FY 1986 appropriation, it is anticipated that approximately 165 projects will be funded for an estimated 145 species, based on past State funding requests. Specific State-by-State allocations will be based on an evaluation of State project proposals by both the Regional and Washington Offices of the Service, using established criteria for ranking immediacy of the threats faced by the species, and the importance of the projects in reversing the threats.

While the Service is requesting termination of this activity in FY 1987, some State programs will be continued through funding provided by prior year unobligated funds. The exact amount of such funding and the number of associated recovery actions will not be known until the end of this year. In the modified table below, some species may have more than one recovery action funded, while in other cases, one recovery action could benefit several species.

	[illegible]	[illegible]	[illegible]
States/Territories participating	[illegible]	[illegible]	0
Species benefitting (Federally-listed)	[illegible]	[illegible]	0
Recovery actions funded	[illegible]	[illegible]	0

Decreases for FY 1987:		FY 1987 Base	FY 1987 Estimate	Decrease
Cooperation with States	([illegible])	[illegible]	0	-[illegible]

The Service has successfully used the cooperative grant program in the past as an incentive to promote active State involvement in endangered species activities. The funding levels sustained over the past ten years have accomplished this aim to a large extent, and now, with the States actively oriented toward the preservation and conservation of endangered species, they are being encouraged to undertake high priority recovery operations in the future. As one means of carrying on this important work, [illegible] States have now instituted income tax checkoffs to enable citizens to directly contribute to nongame wildlife programs, including those for resident endangered species. As of the [illegible] tax year (the latest available data), almost [illegible] million had been collected for this purpose, and both the number of States using the checkoffs and the amount of contributions are expected to increase annually. While the Service cannot presently make an accurate assessment of how many programs will be curtailed in any of the currently-cooperating States, the Service believes that opportunities exist (e.g., grants from private individuals and conservation [illegible]) for the States to secure additional resources to continue their endangered species programs, and expects that no important recovery program would be terminated as a result of the loss of State grant funds.

Object Classification of Changes

The object class detail for the [illegible] decrease is as follows:

Grants, Subsidies, and Contributions	-[illegible]
Total	-[illegible]

Justification of Program and Performance

Activity: General Administration

(Dollar Amounts in Thousands)

Subactivity		1986 Enacted To Date	1986 Adjusted Approp.	87 Base	1987 Estimate	Inc. (+) Dec. (-) From Base
Executive Direction		$ 7,456[1]	7,142	7,456	7,306	-150
	(FTE/T)	(148)	(148)	(148)	(148)	(-0-)
Administrative Services		$10,251	9,810	10,217	10,217	-0-
	(FTE/T)	(369)	(369)	(369)	(369)	(-0-)
Related Support Services		$25,589	24,814	26,667	24,253	-2,414
	(FTE/T)	(-0-)	(-0-)	(-0-)	(-0-)	(-0-)
Subtotal		$43,296	41,766	44,340	41,776	-2,564
	(FTE/T)	(517)	(517)	(517)	(517)	(-0-)
Funded from other than Resource Management		$-7,557	-7,557	-7,557	-5,143	+2,414
	(FTE/T)	(-0-)	(-0-)	(-0-)	(-0-)	(-0-)
TOTAL		$35,739	34,209	36,783	36,633	-150
	(FTE/T)	(517)	(517)	(517)	(517)	(-0-)

[1] Includes $150,000 to provide administrative support to the National Fish and Wildlife Foundation.

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Executive Direction	7,456	-314	7,142

The reduction under P.L. 99-177 totaled $314 thousand for the Executive Direction Program. As a result of this reduction, the eight regional offices, the Washington Office Directorate, and the five staff offices will:

-- delay employee training;
-- delay promotions and the filling of selected vacancies;
-- limit attendance at various national/international resource-related meetings; and
-- delay subscriptions to work-related journals/magazines.

More specifically, examples of reduction impacts include: reduction in the number of extension projects developed; curtailment of training for foreign nationals and foreign technical assistance; and a slower implementation rate of exchanges with China and the Soviet Union.

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Administrative Services	10,251	-441	9,810

As a result of the $441 thousand P.L. 99-177 reduction, the Service will decrease the administrative support provided to all management and operational levels in the functional areas of personnel management, contracting and general services, financial management, information resource management, and safety and security. All offices will limit and decrease the amount of travel, training, supplies and materials purchased, and overall overhead operating costs. Only selected positions will be filled when vacancies occur.

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Related Support Services	18,032	-775	17,257

As a result of the $775 thousand P.L. 99-177 reduction, the Related Support Services component will be reduced or conducted more efficiently in order to meet fixed costs such as rent, telephone postage and workers compensation.

General Administration
(Overview)

Authorization: 16 U.S.C. 724a-742j, Fish and Wildlife Act of 1956, as amended. Establishes a comprehensive national fish and wildlife policy. It authorizes the Secretary of the Interior to take steps required for the development, management, advancement, conservation, and protection of wildlife resources through research, acquisition of refuge lands, development of existing facilities, and other means," and to "conduct continuing investigations, prepare and disseminate information, and make periodical reports to the public, to the President, and to Congress."

Authorization: 16 U.S.C. 3701 et seq., National Fish and Wildlife Foundation Establishment Act. Enacted in 1984, the Act established a federally chartered, nonprofit corporation to encourage and administer donations of property, for the benefit of fish, wildlife and plant resources.

Subactivity: EXECUTIVE DIRECTION: FY 1987 - $7,456,000/148 FTE

Program Objective: To establish and maintain a management structure and process that will facilitate effective and efficient operations and be responsive to new or changing demands placed on the Service.

Base Program: The Executive Direction Program provides national guidance in planning and managing all operational programs of the Service. Executive Direction Program components also represent the Service to Congress, Departmental officials, other Federal agencies, State agencies, national and international organizations and members of the general public who may have an interest in fish and wildlife resources. The Service Directorate is comprised of the key Service employees responsible for these functions--the Director, Deputy Director, Washington-based associate and assistant directors, regional directors, and office chiefs of Legislative Services and Equal Opportunity. The Executive Direction Program provides funding for the members of the Directorate and their immediate support staffs as well as the Washington staff offices of Public Affairs, Planning and Budget, Legislative Services, Equal Opportunity, and International Affairs. The Program also provides base funding for the Office of Extension.

Office of the Director and National Program Managers: ($1,739,000/24 FTE-Total). The Director determines long-term program objectives, major program policies and strategies, as well as budget and legislative proposals. He exercises line supervision over the national program managers, regional directors, and chiefs of Washington staff offices. The Deputy Director assists with overall line management responsibility and serves as the Program Manager for the Executive Direction Program.

The Executive Direction Program through the Associate Director for Federal Assistance is responsible for providing administrative support for the National Fish and Wildlife Foundation as it becomes operational and self-sustaining. This entity was established by Public Law 98-244, enacted in 1984, to encourage and administer donations of real or personal property in support of Fish and Wildlife Service programs and other activities initiated for the benefit of fish, wildlife and plant resources. Consistent with the approved 1985 reprogramming, funds from the resource programs were provided in 1986 to administratively support the National Fish and Wildlife Foundation. A response to FY 1986 conference committee report language concerning cooperative arrangements with the National Fish and Wildlife Foundation is being provided with the FY 1987 Budget Justification.

Under the Office of the Director, approximately $80,000 was set aside in FY 1986 as a fund to cover contingencies that, by their nature, cannot be foreseen. In FY 1985, for example, the fund provided support for priority personnel training and details, and the purchase of equipment to automate collection and validation of affirmative action statistics.

The Executive Direction Program provides funding for the Associate and Deputy Associate Directors for Wildlife Resources, Fishery Resources, Federal Assistance (Endangered Species and Federal Aid), Habitat Resources, and the Assistant Director for Administration, who serve as program managers. Program Managers determine direction for the operational programs. Based on an analysis of needs of the resource for which they are responsible, these managers establish goals and objectives, develop estimates of dollar and manpower needs, select the most effective means for accomplishing objectives, establish general rules for program conduct, allocate resources to achieve expected program outputs and benefits, and monitor and evaluate program accomplishments. The program management structure is closely tied to the budget structure. Each operational program manager is responsible for the planning, justification, execution, and evaluation of one or more specific budget activities. They have line authority for their respective Washington Office program activities. In addition, the Servicewide engineering function is managed by the Associate Director for Fishery Resources and the Finance Center is managed by the Assistant Director for Administration.

Offices of Regional Directors: ($1,923,000/32 FTE-Total). In general, line authority for FWS operational programs flows from the Director to the regional directors. Authority for program execution flows from the national program managers to the regional directors. The Associate Director for Research and Development (Region 8) has line authority over the Service's research facilities nationwide, as well as the Cooperative Fish and Wildlife Units. The regional directors are responsible for accomplishing objectives and achieving intended results through the most efficient use of funds and manpower made available for program operations. As members of the Service Directorate, they also participate in the process of planning national direction for Service program objectives.

Legislative Services: ($296,000/7 FTE-Total). The Office of Legislative Services serves as the liaison between the Director of the Fish and Wildlife Service and Congress for non-budget issues. The office is responsible for responding to Congressional inquiries and coordinating briefings for Members of Congress and Congressional staff on FWS programs. The office is also responsible for the preparation and clearance of testimony for Congressional hearings, as well as FWS reports on bills introduced in the Congress and legislative proposals developed by other agencies. In addition, Legislative Services prepares proposed legislation regarding Service programs for submission to Congress and advises the Director on the impacts of Congressional actions.

Public Affairs: ($585,000/17 FTE-Total). Public Affairs initiates, consolidates and distributes public information materials on Fish and Wildlife Service programs. Additionally, it serves as the focal point for providing responses to news media inquiries. It provides advice to the Director on Servicewide policy, decisions, and anticipated public reaction to program initiatives. In recent years, Public Affairs has focused increasing attention, within available manpower, on carrying out Departmental and OMB guidelines for the cost-effective management of Service publications, audio-visual materials and other public communications. The office also serves as a primary point of contact with the Service for coordination of corporate support and grants to Service programs.

Office for Equal Opportunity: ($1,042,000/27 FTE-Total). The Office for Equal Opportunity serves as staff to the Directorate on all matters relating to equal opportunity and civil rights. Offices, maintained in each region, direct regional efforts to meet the Service's affirmative action objectives. The office has the overall responsibility for administering an affirmative action plan, managing a complaints program for employees, developing special emphasis programs, monitoring the Historically Black College Program, and providing leadership and training to managers regarding human resource decisions.

Planning and Budget: ($1,166,000/27 FTE-Total). This office provides staff support to the Director and has lead responsibility for conducting special analyses and for providing national guidance in the areas of policy, planning, and budget. It monitors Directorate implementation of Congressional concerns and the Administration's missions, goals, objectives, and policies. The office coordinates responses to Congressional budget questions, prepares briefings and special budget analyses for the Director, and issues technical instructions and guidance. It provides leadership in developing policies and instructions for the formulation, justification, and execution of Service budgets, and is instrumental in preparing the proposed budget and associated materials each year for all higher levels of review. In executing the budget, the office prepares apportionments, issues allotments, and provides analyses of reports. The office also coordinates program planning within the Service, and externally with government bodies and public and private organizations.

International Affairs: ($442,000/9 FTE-Total). This office brings focus and a systematic approach to the international activities of the Service. It provides advice and coordinates the development and implementation of international agreements, treaties and conventions, and the exchange of technical information between the Service and foreign wildlife agencies. The office focuses on international activities that are Servicewide in scope, rather than on those that involve a single program function. Executive Direction funds Service participation in Area V of the US-USSR Environmental Agreement and supports Service implementation of the Western Hemisphere Convention. In addition, International Affairs administers the Special Foreign Currency Program in India, Pakistan, and Egypt. In FY 1987, increased emphasis will also be placed on work with the Peoples Republic of China and on the Agency for International Development's biological diversity initiative.

Office of Extension: ($263,000/5 FTE-Total). To further the objective of fish and wildlife conservation by private citizens on private lands, the Office of Extension directs a national system of fish and wildlife communication and education through the cooperative extension education systems administered by the Departments of Agriculture and Commerce through the Land Grant and Sea Grant Universities. The office is administered by the Associate Director for Research and Development and provides extension fish and wildlife specialists with accurate scientific information and assistance in a form that can be used by county extension agents and the clientele they service. This office also supports the Fish and Wildlife 4-H award program in which more than 430,000 youth participate.

Decrease for FY 1987

(Dollar Amounts in Thousands)

		FY87 Base	FY87 Estimate	Difference
Executive Direction	($)	7,456	7,306	-150
	(FTE/T)	(148)	(148)	(-0-)

National Fish and Wildlife Foundation: (-$150,000/0 FTE - Total)

A $150,000 decrease is proposed for the National Fish and Wildlife Foundation in FY 1987. The National Fish and Wildlife Foundation was established by Public Law 98-244, enacted in 1984. Under the Act, the Service may provide administrative support to the Foundation as it becomes operational and self-sustaining. Although proposed Administrative support for the National Fish and Wildlife Foundation was provided by the Executive Direction Program through the Associate Director for Federal Assistance in FY 1986, it is anticipated that the Foundation will become self-sustaining by FY 1987.

The object class distribution of the $150,000 decrease is as follows:

o Travel and transportation of persons	$40,000
o Communications, utilities, and space	$22,500
o Other services	$85,700
o Supplies and materials	$ 1,800

Subactivity: ADMINISTRATIVE SERVICES: FY 1987 $10,217,000/369 FTE

Program Objectives:

- To insure that the Service's business and financial activities meet operating guidelines and performance standards established by law, regulation, directive or other policy.

- To achieve savings goals by implementing OMB management initiatives to increase productivity and promote the efficient use of administrative resources.

- To maximize private sector contracting for the supplies, equipment, materials and services necessary to support the operating programs.

- To implement the Service's long-range space reduction plan to achieve the overall goal of 135 square feet of office space per person in accordance with the provisions of FPMR Temporary Regulation D-68.

- To implement the President's program to review and strengthen internal controls to eliminate waste, fraud and abuse.

Base Program: The Administrative Services (AS) Program insures that business and financial activities within the FWS comply with existing laws, regulations or other policies. Administrative support is provided to all management and operational levels in the functional areas of personnel management, contracting and general services, financial management, information resources management and safety and security. Administrative staffs are located in the headquarters office, the regional offices and the Fish and Wildlife Service Finance Center. The headquarters staff serves the personnel and operating programs in the Washington, D.C., area in addition to providing national program leadership in each of the major functional areas. The regional offices implement national administrative program policies at the field level and develop supplemental guidelines, as necessary, to meet local operating exigencies. The Finance Center provides financial accounting, reporting and document processing services, and maintains the Service's Program and Financial Management Information System (PFMIS).

Program Administration: ($680,000/18 FTE-T). National program management and direction are provided within this function to the Administrative Services and Related Support Services subprograms. The administrative staff coordinates activities with the operating programs, develops and disseminates administrative program financial and operating plans, and oversees the implementation of approved operational policy and guidelines. The staff also coordinates and monitors controlled correspondence in response to White House, Congressional and public inquiries. This function also includes the Assistant Regional Directors for Administration and their immediate staffs who direct the overall management and execution of administrative program activities within their respective regions. They are the regional directors' key representatives and counsel in administrative matters and provide day-to-day operational guidance to the administrative functions of personnel, finance, contracting and procurement, safety and security, and ADP management. They are responsible for completion of the program goals and objectives established by the Office of the Assistant Director for Administration.

Personnel Management: ($2,800,000/100 FTE-T). This function provides basic personnel support to the Service's approximately 6,500 permanent and 2,000 summer employees. Priority is placed on processing routine personnel actions relating to recruitment, hiring, changes of employee status and separations (over 30,000 routine personnel actions processed each year). Servicewide policies and guidelines are developed and implemented for staffing and employment, pay administration, position classification and management, merit pay and performance appraisal, employer/employee relations relative to unions and bargaining units, and merit promotions.

Contracting and General Services: ($2,340,000/101 FTE-T). This function provides the Service's professional and technical contracting support including advertising and negotiating contracts, ongoing contract administration, procurement, and small purchasing. General services are also provided, including space management, motor vehicle management, property and government quarters management, transportation of household goods, printing and reproduction, and supply services.

Financial Management: ($1,023,000/37 FTE-T). This function provides Servicewide policy and guidance in all areas of fiscal management. The Washington-based Division of Finance coordinates the allocation and internal control of appropriated funds, and provides operational guidance for the implementation of major administration initiatives such as cash management and the internal control program to prevent waste, fraud and abuse. Regional finance offices provide technical assistance to the operating programs in the areas of travel funds management, financial document preparation and input, and financial reporting/monitoring. Servicewide imprest fund services are provided within this function.

Fish and Wildlife Service Finance Center: ($2,290,000/85 FTE-T). The Finance Center provides Servicewide financial accounting, document processing, collection and payment services, and is the focal point for operation and maintenance of the Program and Financial Management Information System (PFMIS). The Center is responsible for recording, analyzing and reporting revenues and obligations for funds accounting and control. It processes over 300,000 financial transactions annually and designs and develops labor cost and output reports for managers to compare actual versus planned costs and accomplishments. The Center has the lead responsibility for compliance with the Prompt Payment Act of 1982 and assures that payments for goods and services are processed within established time standards.

Primary Finance Center operating objectives in FY 1987 will be to meet all time and quality standards for processing vendor payments, thus eliminating late payment penalties, to reduce debts owed to the Service and to support the Service's outstanding travel advance reduction program by further improving voucher processing times.

Safety and Security: ($544,000/14 FTE-T). The headquarters and regional safety and security offices develop, implement, administer, and review Servicewide policies and procedures designed to prevent the illness or injury of Service employees and the visiting public, and to reduce motor vehicle accidents and property damage. Safety managers provide technical assistance to field station managers and conduct site visits and inspections to identify and correct safety hazards and promote sound safety management. This function also includes the Service's security program, including ADP security. At the field level, the Service emphasizes an aggressive safety and health program to minimize the loss of human and material resources due to accidents or illness. The safety program in FY 1987 will continue to emphasize hazards abatement and public safety to reduce accidental injuries or deaths. The main thrusts of the effort will be to promote a "self help" program at the field level by increasing the responsibilities and capabilities of field station personnel. Field station activity will be augmented by visits of assistance from professional safety staff.

Information Resources Management: ($540,000/14 FTE-T). The Office of Information Resources Management (OIRM) staff provides policy and guidance related to information and data transfer including automated data processing, word processing, telecommunications, radio communications and paperwork management. The primary goal of the organization is to achieve maximum efficiency and effectiveness of the flow of management information.

The IRM function incorporates activities relating to forms and directives management, Freedom of Information Act (FOIA) requests and regulatory reform. It also coordinates the Service's automated data processing (ADP) resources and implements the ADP Management Program.

Subactivity: RELATED SUPPORT SERVICES (RSS) FY 1987 $24,253/0 FTE

Program Objective: To provide central management of Servicewide administrative overhead expenses.

Base Program: The RSS Program consists of centralized cost accounts for budgeting and paying the operating overhead expenses common to all Service programs. Centralized management of these accounts permits a higher visibility of usage and costs for accurate accounting and budgeting, facilitates prompt payment of the consolidated bills received by the Service, and provides the most direct and effective mechanism by which Servicewide initiatives can be implemented to exert management control over the use of these services. The following table displays RSS funding.

(dollars in thousands)

	FY 1985 Actual	1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) or Dec. (-) From Base
Rent	11,951	11,780	12,403	12,403	
FTS	4,233	3,286	3,286	2,086	- 1,200
PFMIS	0	1,000	1,200	1,200	
Postage	2,403	2,788	2,788	1,788	- 1,000
Workers Compensation	1,544	1,644	2,022	2,022	
Unemployment Compensation	229	1,422	1,600	1,600	
Regional Admin. Overhead	1,050	1,154	1,154	1,154	
PAY/PERS	540	540	540	540	
Printing and Office Svs.	377	300	300	86	- 214
Working Capital Fund	304	375	674	674	
Comm'l Telecommunications	302	325	500	500	
Departmental Manager De-Development Program	200	200	200	200	
	23,133	24,814	26,667	24,253	- 2,414

Over 95% of total costs in the RSS accounts represent charges by servicing agencies that are beyond direct user control. Billings are issued on the basis of projected usage, or they represent prorated shares of total system operating costs. The Service has taken aggressive action to control the use of services within these accounts, particularly leased space, postage and FTS, and the current and projected costs represent the minimum level of support necessary to accomplish planned resource program objectives. Detailed descriptions of the major cost accounts in the RSS subactivity and the factors affecting costs follow.

Rent: The Service uses leased space for office, warehouse and storage facilities to accommodate administrative, professional and technical program activities in areas where on-site facilities are needed, but where Service owned space is unavailable and construction or acquisition of new space is impractical.

Federal Telecommunication System (FTS): The Department of Interior receives an annual FTS cost estimate from GSA and prorates costs to user bureaus/offices on the basis of a statistical sampling of prior year usage. The FY 1987 FTS cost will be approximately $1.0M less as a result of our electronic mail usage.

Postage: The Service is billed under the U.S. Postal Service's Revenues, Pieces and Weights Sampling System. The USPS estimates and assesses costs for a projected level of usage determined by the statistical sampling of incoming mail at selected post offices. Due to internal cost saving measures, i.e., the increased use of bulk and lower classes of mail, and reduced reliance on the surface mail system because of the implementation of a computerized personnel and payroll input system, the Service does not project an increase in postage costs.

Workers Compensation: The Service is billed by the Department of Labor for costs incurred in satisfying claims under the Federal Employees Compensation Program. Costs are based on a formula that allows employees (and survivors) up to 75% of gross pay in compensation for work related illnesses, injuries or deaths. The Service can, and does, indirectly affect these costs by striving to provide a safe and healthy work environment for its employees (see Safety and Security under AS). However, there is no direct action the Service can take to limit claims or control costs on a year-by-year basis. Inflationary factors, i.e., higher salaries and wages, continue to increase annual costs.

Regional Office Administrative Overhead: The Service's regional offices incur local administrative overhead costs which are funded in the RSS subactivity. Some of the significant cost items are office equipment lease, rental and maintenance (25% of total); printing and reproduction, supplies, material, and other office services.

PAY/PERS System: This is a recurring expense for participation in the PAY/PERS automated personnel and payroll system operated by the Bureau of Reclamation (BOR). The Service is charged a pro rata share of the total system operating cost which includes only BOR processing services and mainframe computer support. This is not related to the Service's internal operating cost to maintain a nationwide data input capability.

Working Capital Fund: The Service is charged a pro rata share of costs for common administrative services provided at the Department level, e.g., health services, building security, printing services, employee counseling, mail operations, etc.

Unemployment Compensation: The Service is billed for a prorated share of costs incurred by the Department for unemployment compensation paid by the States to former DOI employees. There is no direct mechanism available to the Service for validating costs since billings are not sufficiently detailed. The Service is billed on an intermittent quarterly basis, with frequent adjustments to past billings.

For these reasons, budget year costs cannot accurately be projected. However, since costs may fluctuate greatly from billing period to billing period, annual cost projections may be subject to revision as actual bills are received.

Commercial Telephone: The Service is billed monthly by the commercial telephone companies for maintenance of telephones, use of telephone lines and non FTS calls.

PFMIS: The Program and Financial Management Information System (PFMIS) is the principal informational component of the Program Management System. It reports on current year implementation of the program advice by providing quantative program and financial data at successive program level.

Changes for FY 1987:		FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) From Base
Related Support	($)	26,667	24,253	- 2,414
Services	(FTE-Total)	(0)	(0)	(0)

The Service proposes a $2,414,000 decrease in the following Related Support Services accounts:

Account	Action	Base Funding	Proposed Change
Postage	The Service is billed by the U.S. Postal Service on its projected level of usage. In FY 1987 the Service anticipates reducing the level of postage usage by increasing the usage of electronic mail which is faster, less expensive and more efficient. Presently all regional offices and many field stations have varying levels of ADP capability which will be fully utilized to expand an electronic mail delivery to the degree feasible.	2,788	-1,000

FTS	The Service is billed by the Department on its projected use of FTS. In FY 1987, the Service anticipates reducing the level of FTS usage by relying more on the usage of electronic mail which is less expensive and more efficient.	3,000	-1,200
Printing	Presently the Service pays the majority of the W.O. printing costs out of a centralized account. Starting in FY 1987 each program will pay its own printing costs. This procedure will improve the efficiency in monitoring & controlling the expenditures within the programs.	300	- 214
Total			$- 2,414

Summary of Requirements by Object Class

(Dollar Amounts in Thousands)

Appropriation: Resource Management	1987 Base		1987 Estimate		Inc(+)/Dec(-)	
	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount
Object Class						
11. Personnel Compensation	...	...	...	...	...	...
11.1 Permanent Positions	4,583	135,038	4,583	135,038		
11.3 Positions Other Than Permanent	793	11,434	743	10,711	-50	-723
11.5 Other Personnel Compensation	...	5,132	...	5,132	...	...
Total Personnel Compensation	5,376	151,604	5,326	150,881	-50	-723
Other Objects						
12.1 Personnel Benefits	...	23,984	...	23,869	...	-115
13.0 Benefits for Former Personnel	...	1,000	...	1,000	...	...
21.0 Travel and Transportation of Persons	...	9,835	...	9,835	...	...
22.0 Transportation of Things	...	2,805	...	2,805	...	...
23.1 Standard Level User Charges	...	12,405	...	12,405	...	...
23.2 Rental Payments to Others	...	12,312	...	12,312	...	...
24.0 Printing and Reproduction	...	2,013	...	2,013	...	...
25.0 Other Services	...	40,894	...	33,823	...	-7,071
26.0 Supplies and Materials	...	10,031	...	10,792	...	+761
31.0 Equipment	...	11,267	...	12,167	...	+900
32.0 Lands and Structures	...	2,449	...	2,547	...	+98
41.0 Grants, Subsidies, and Contributions	...	9,367	...	...	...	-9,367
42.0 Insurance Claims and Indemnities	...	1,500	...	1,500	...	...
91.0 Unvouchered	...	200	...	200	...	...
Total Requirements	5,376	296,644	5,326	281,127	-50	-15,517

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DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
RESOURCE MANAGEMENT

Program and Financing (in Thousands of Dollars)

[illegible]	19 85 actual	19 86 estimate	19 87 estimate
Budget authority			
40 00 Appropriation	[illegible]	[illegible]	285127
40 00 Reduction pursuant to P.L. 99-177		[illegible]	
43 00 Appropriation (adjusted)	[illegible]	[illegible]	285127
Relation of obligations to outlays			
71 00 Obligations incurred, net	[illegible]	[illegible]	285127
72 40 Obligated balance, start of year	[illegible]	[illegible]	[illegible]
74 40 Obligated balance, end of year	[illegible]	[illegible]	[illegible]
90 00 Outlays	[illegible]	[illegible]	[illegible]

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
RESOURCE MANAGEMENT

Object classification (in thousands of dollars)

Identification code 14-1611-0-1-303	19 85 actual	19 86 estimate	19 87 estimate
Direct obligations			
Personnel compensation			
11 1 Full-time permanent	136792	135038	135038
11 3 Other than full-time permanent	14817	11434	10711
11 5 Other personnel compensation	3587	5132	5132
11 9 Total personnel compensation	155196	151604	150881
12 1 Personnel benefits: civilian	26165	23984	23869
13 0 Benefits for former personnel	1585	1000	1000
21 0 Travel and transportation of persons	9478	9421	9835
22 0 Transportation of things	3435	2620	2805
23 1 Standard level user charges	12354	11851	12403
23 2 Communications, utilities, and other rent	12150	12312	12312
24 0 Printing and reproduction	2415	2013	2013
25 0 Other services	49780	45254	33823
26 0 Supplies and materials	22772	19031	19792
31 0 Equipment	12837	11680	12147
32 0 Lands and structures	1938	2449	2547
41 0 Grants, subsidies, and contributions	1093	5367	0
42 0 Insurance claims and indemnities	1591	1500	1500
91 0 Unvouchered	103	200	200
99 0 Subtotal, direct obligations	312904	300286	285127
99 0 Reimbursable obligations	29720	37000	37000
99 9 Total obligations	342623	337286	322127

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
RESOURCE MANAGEMENT

Object classification (in thousands of dollars)

Identification code 14-1611-0-1-303	19 85 actual	19 86 estimate	19 87 estimate
Reimbursable obligations:			
Personnel compensation:			
11.1 Full-time permanent	11617	12463	8044
11.3 Other than full-time permanent	2104	1402	896
11.5 Other personnel compensation	161	260	260
11.9 Total personnel compensation	13882	14125	9200
12.1 Personnel benefits: civilian	1771	2235	1455
21.0 Travel and transportation of persons	670	705	734
22.0 Transportation of things	356	538	560
23.2 Communications, utilities, and other rent	647	1047	1089
24.0 Printing and reproduction	70	218	226
25.0 Other services	8826	14426	19781
26.0 Supplies and materials	2384	2455	2556
31.0 Equipment	1033	1064	1108
32.0 Lands and structures	84	87	91
91.0 Unvouchered	6	100	200
99.0 Subtotal, reimbursable obligation	29729	37000	37000
99.9 Total obligations	342623	337286	32[illegible]27

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July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
RESOURCE MANAGEMENT
PERSONNEL SUMMARY

Identification code 14-1611-0-1-303	19 85 actual	19 86 estimate	19 87 estimate
Direct:			
Total number of full-time permanent positions	4643	4583	4583
Total compensable workyears:			
Full-time equivalent employment	5579	5374	5324
Full-time equivalent of overtime and holiday hours	134	134	134
Average ES salary	66619	66619	66619
Average GS grade	9.58	9.54	9.55
Average GS salary	29374	29374	29374
Average salary of ungraded positions	22550	22550	22550
Reimbursables:			
Total number of full-time permanent positions	261	423	273
Total compensable workyears:			
Full-time equivalent employment	501	520	335
Full-time equivalent of overtime and holiday hours	6	6	6
Average GS grade	9.58	9.54	9.55
Average GS salary	29374	29374	29374
Average salary of ungraded positions	22550	22550	22550

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STANDARD FORM 300
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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
RESOURCE MANAGEMENT (Pursuant to P L 99-177)

Program and financing (in thousands of dollars)

Identification code 14-1611-6-1-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
Direct program:			
1 Habitat resources			
2 Wildlife resources			
3 Fishery resources			
4 Endangered species			
5 General administration			
Total, direct program			
Reimbursable program			
10.00 Total obligations		-13078	
Financing:			
Offsetting collections from:			
11.00 Federal funds			
14.00 Non-federal sources			
21.40 Unobligated balance available, start of year			
24.40 Unobligated balance available, end of year			
25.00 Unobligated balance lapsing		192	
39.00 Budget authority		-12886	

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
RESOURCE MANAGEMENT (Pursuant to P.L. 99-177)

Program and financing (in thousands of dollars)

Identification code 14-1611-6-1-303	19 85 actual	19 86 estimate	19 87 estimate
Budget authority:			
40.00 Appropriation			
40.00 Reduction pursuant to P.L. 99-177		-12886	
43.00 Appropriation (adjusted)		-12886	
Relation of obligations to outlays			
71.00 Obligations incurred, net		-12078	
72.40 Obligated balance, start of year			-2568
74.40 Obligated balance, end of year		2568	
90.00 Outlays		-10510	-2568

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
RESOURCE MANAGEMENT (Pursuant to P L 99-177)

Object classification (in thousands of dollars)

Identification code 14-1611-6-1-303	19 85 actual	19 86 estimate	19 87 estimate
Direct obligations			
92.0 Undistributed		-13078	
(Mono cast: 31.5)	(Mono cast: 6)	(Mono cast: 5)	(Mono cast: 4.9)

Construction [And Anadromous Fish]

For construction and acquisition of buildings and other facilities required in the conservation, management, investigations, protection, and utilization of sport fishery and wildlife resources, and the acquisition of lands and interests therein; [$21,296,000] $3,113,000, to remain available until expended [, of which $2,000,000 shall be available for expenses to carry out the Anadromous Fish Conservation Act (16 U.S.C. 757a-757g)].

(Department of the Interior and Related Agencies Appropriations Act, 1986 as included in Public Law 99-190.)

Justification of Proposed Language Change

", of which $2,000,000 shall be available for expenses necessary to carry out the Anadromous Fish Conservation Act (16 U.S.C. 757a-757g)"

The above language is proposed for deletion. The expanded Dingell-Johnson program makes continued funding for separate anadromous fish grants unnecessary.

Appropriation Language Citations

Fish and Wildlife Service

Appropriation: Construction [and Anadromous Fish]

Appropriation language

For construction and acquisition of buildings and other facilities required in the conservation, management, investigations, protection, and utilization of sport fishery and wildlife resources, and the acquisition of lands and interests therein; [$21,296,000] $3,113,000, to remain available until expended [; and for expenses necessary to carry out the Anadromous Fish Conservation Act (16 U.S.C. 757a-757g) $2,000,000, to remain available until expended].

Appropriation Language citations and Explanations

16 U.S.C. 460k-460k-4
16 U.S.C. 460 -9
16 U.S.C. 460 -17-18
16 U.S.C. 668dd
16 U.S.C. 695k-695r
16 U.S.C. 696-696b
16 U.S.C. 697-697a
16 U.S.C. 715k
16 U.S.C. 742f (742j)
16 U.S.C. 760-760-12
16 U.S.C. 778a
16 U.S.C. 1051-1058

16 U.S.C. 460k-460k-4 provides for authorization of development for recreational use of fish and wildlife areas including land acquisition, and facilities construction and maintenance.

16 U.S.C. 460 -9 provides for acquisition of lands and waters for endangered and threatened species of fish and wildlife.

16 U.S.C. 460 -17-18 provides for construction and operation of fish and wildlife recreation and enhancement facilities in conjunction with certain water resources projects provided for under the Federal Water Project Recreation Act.

16 U.S.C. 668dd provides for authorization of contracts for the provision of public accommodations, acceptance of donations and authority to use such funds to acquire or manage lands in the administration for the National Wildlife Refuge System.

16 U.S.C. 695K-695r provides for likitations on reduction of areas by diking or other construction in California and Oregon in the case of migratory waterfowl and other refuges, as well as other construction provisions.

16 U.S.C. 696-696b provides for acquisition of land and property or the Key Deer National Wildlife Refuge.

16 U.S.C. 697-697a provides for the establishment and maintenance of the Wyandotte National Wildlife Refuge.

16 U.S.C. 715k provides for land acquisition, construction, maintenance, development and administration for migratory bird reservations.

16 U.S.C. 742f allows for taking such steps as required for the development, management, advancement, conservation, and protection of fish and wildlife resources and for acquisition of refuge land, development of existing facilities and other means.

16 U.S.C. 760-760-12 provides for the construction, equipping, maintenance, and operation of several specifically named fish hatcheries.

16 U.S.C. 778a provides for authorization of land acquisition, construction of facilities, employment of personnel, and other activities in establishment of fish research and experiment stations.

16 U.S.C. 1051-1058 provides for authorization to plan, construct, and maintain and acquire land and property for the National Fisheries Center and Aquarium.

1. and for expenses necessary to carry out the Anadromous Fish Conservation Act

16 U.S.C. 757a-757g, as amended

16 U.S.C. 757a-757g provides for authorization for the grant-in-aid program to eligible States and other non-Federal interests for the conservation, enhancement or restoration of anadromous fish and those fish of the Great Lakes that ascend streams to spawn. Extends through FY 1984 the authorization for the emergency striped bass study under section 7(d).

2. to remain available until expended

16 U.S.C. 757d(a)

16 U.S.C. 757d(a) provides that "Sums appropriated under this subsection are authorized to remain available until expended.

Basic authorizing legislation
There is no specific authority for the construction portion of this appropriation to remain available until expended.

The Service believes these funds should remain available until expended because experience has shown that preparation of design, specifications, and bid invitations, together with bid solicitation and awarding of the contract, requires more time than is normally available once the funds become available. This provision will provide for continuous obligational authority and orderly flow of construction work uninhibited by the usual September 30 cut-off which is associated with annual appropriations.

Status of Request for Budget Resources

Account: Construction [and Anadromous Fish] (14X1612)

Fiscal Year 1986 Budgetary Status

Appropriation, 1986		$21,296,000
Reduction pursuant to PL 99-190		-128,000
Appropriation, adjusted		21,168,000
Unobligated balance from prior years		40,815,000
Total BA available for obligation		61,983,000
Less: Anticipated obligations (by account)		
1. Construction and rehabilitation	$33,894,000	
2. Anadromous Fish -	2,300,000	
Total anticipated obligations		-36,194,000

Fiscal Year 1987 Request

Anticipated unobligated balance brought forward..........	25,028,976
Plus: Increases proposed	
Construction and rehabilitation	3,113,000
Total anticipated BA available for obligation..............	$28,141,976

Summary of Requirements

	FTE/P	Amount	FTE/P	Amount
Appropriation, FY 1986			[illegible]	[illegible]
P.L. 99-177 Budget authority cancelled				[illegible]
Adjusted FY 1986 Appropriation			[illegible]	[illegible]
Adjustments to base:				
Adjustment for 1986 impact of P.L. 99-177		[illegible]		
Other adjustments		[illegible]		
Subtotal, adjustments to base				[illegible]
FY 1987 base budget			[illegible]	[illegible]
Program changes			[illegible]	[illegible]
Total requirements			[illegible]	[illegible]

Summary of Requirements

Activity/Subactivity	1985 Appropriation	1986 Adjusted Appropriation	FTE/P	1987 Budget Estimate	FTE/P	Budget Estimate 1987 Compared With Appropriation	FTE/P
1. Construction & rehabilitation							
Appropriation	[illegible] 1/ 2/	[illegible] 5/	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Unobligated balance brought forward	[illegible]	[illegible]		[illegible]		[illegible]	
Obligation program	[illegible]	[illegible]		[illegible]		[illegible]	
Unobligated balance carried forward	[illegible]	[illegible]		[illegible]		[illegible]	
2. Anadromous fish							
Appropriation	[illegible] 3/	[illegible] 5/				[illegible]	
Unobligated balance brought forward	[illegible] 4/	[illegible]		[illegible]		[illegible]	
Obligation program	[illegible]	[illegible]		[illegible]		[illegible]	
Unobligated balance carried forward	[illegible]	[illegible]		[illegible]		[illegible]	
Total appropriation	[illegible]	[illegible]		[illegible]		[illegible]	
Total unobligated balance brought forward	[illegible]	[illegible]		[illegible]		[illegible]	
Total obligation program	[illegible]	[illegible]		[illegible]		[illegible]	
Total unobligated balance carried forward	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

1/ Includes [illegible]

2/ Includes [illegible]

3/ Includes [illegible]

4/ Includes [illegible]

5/ [illegible] P.L. 99-177.

Justification of Program and Performance

Activity: Construction and Rehabilitation

(Dollar amounts in thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) From Base
Wildlife Refuges		[illegible]	[illegible]	0	0	0
Fish Hatcheries		[illegible]	[illegible]	0	0	0
Fishery Research Facilities		[illegible]	[illegible]	0	0	0
Wildlife Research Facilities		[illegible]	[illegible]	0	0	0
Dam Safety		[illegible]	[illegible]	0	[illegible]	[illegible]
Advance Planning		[illegible]	[illegible]	0	[illegible]	[illegible]
Total Requirements	$(000) (FTE)	[illegible] [illegible]	[illegible] [illegible]	[illegible] [illegible]	[illegible] [illegible]	[illegible] [illegible]

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Wildlife Refuges	[illegible]	[illegible]	[illegible]
Fish Hatcheries	[illegible]	[illegible]	[illegible]
Fishery Research Facilities	[illegible]	[illegible]	[illegible]
Wildlife Research Facilities	[illegible]	[illegible]	[illegible]
Dam Safety	[illegible]	[illegible]	[illegible]
Advance Planning	[illegible]	[illegible]	[illegible]
Total Construction and Rehabilitation	[illegible] [illegible]	[illegible] [illegible]	[illegible] [illegible]

The P.L. 99-177 reduction of approximately 4.3% is applied across all projects in the construction and rehabilitation program. The actual impact cannot be determined until design is completed and invitations for bid are issued for the specific projects. If the P.L. 99-177 line-item reductions result in inadequate funds to carry out certain projects as intended, it may be necessary for the Service to adjust the projects to accommodate available funds, or reprogram funds from lower priority projects in order to accomplish the higher priority projects.

Authorization: 16 U.S.C., 742(a)-742(j); Fish and Wildlife Act of 1956. Directs the Secretary of the Interior to provide continuing research, extension, and information services, and to take any necessary steps to develop, manage, protect, and conserve fishery and wildlife resources including research. 16 U.S.C. 668dd-668ee; National Wildlife Refuge System Administration Act of 1966, as amended. Authorizes the Secretary of the Interior to administer and manage the National Wildlife Refuge System to protect and conserve fish and wildlife.

Presidential Memorandum of October 4, 1979, directing all Federal agencies to adopt and implement the Federal Guidelines for Dam Safety (dated June 25, 1979) as prepared by the Ad Hoc Interagency Committee on Dam Safety of the Federal Coordinating Council for Science, Engineering and Technology.

Secretary of the Interior Order No. 3048, to implement and assign responsibility for a Departmentwide dam safety program in accordance with the President's Memorandum of October 4, 1979.

Overview of Construction Program and Construction Priorities: The Fish and Wildlife Service construction program supports operation and maintenance of national wildlife refuges, national fish hatcheries, fish and wildlife research laboratories, and other facilities. Priorities for proposed projects are established on both a programmatic and national basis. Specific priorities are developed for each component of the construction activity. The final mix of projects is determined based on overall contribution to the mission and goals of the Service.

The FY 1987 construction request provides for:

1) Continuation of the dam safety program, including dam inspections as required by the Federal dam safety program, and repair and rehabilitation of dams to remedy deficiencies or structural problems identified through dam inspections;

2) Enhancing advance planning and conceptual design capabilities by acquisition of Computer-Aided Drafting/Design (CADD) equipment.

The FY 1987 request for construction includes a decrease of 47 FTEs from the FY 1986 level based on the probability of very limited construction budget requests under the budgetary climate for the immediate future. This will be accommodated by eliminating a number of technical engineering support positions in the Service's Denver Engineering Center and reducing the regional engineering and design staffs. Increased use will be made of architectural and engineering contracts (A & E contracts) to provide engineering services as necessary for Service programs.

DAM SAFETY

Under requirements of Secretarial Order 3048 and the President's memorandum of October 4, 1979, the Service implemented a dam safety program entailing systematic inspection of dams associated with wildlife refuges, fish hatcheries, and research laboratories to reveal structural deficiencies and potential hazards to the public of dams located on Service facilities. Inspection reports are used to establish a priority ranking for repair work necessary to maintain structural integrity and operational adequacy. In evaluating the results of the investigations and determining the need and priority for remedial repairs, the Service considers safety factors as well as the utility of the dam in meeting the management objectives or purpose of the refuge or hatchery and the probable cost of repair. If a structure is not needed for specific wildlife or fishery objectives, alternatives other than repair are considered.

The FWS completed its initial Safety Evaluation of Existing Dams (SEED) inspections in FY 1984. The SEED inspection process identifies deficiencies in the dams that may result in a safety or operational hazard. In addition, the SEED report establishes the priority for needed action based on the following basic factors:

Hazard Potential Classification - potential impact downstream in the event of failure of the dam; not dependent on the condition of the dam.

- High - extensive development in the watershed downstream with potential for loss of more than a few lives and extensive economic loss.
- Significant - some human habitation downstream with potential for some loss of life and appreciable economic loss.
- Low - no probable loss of life; minimum economic loss.

Priority For Repair

- Emergency - structure in danger of imminent collapse; immediate action required.
- Priority 1 - normal operation impaired; safety of structure in possible jeopardy.
- Priority 2 - maintenance deficiency; correctable with maintenance funds.

The Federal Guidelines for Dam Safety (issued by the Ad Hoc Interagency Committee on Dam Safety, ICODS, in June 1979) establish a general goal "to make Federal dams as safe as practical..." The Guidelines are intended "...to improve existing dams according to hazard potential as estimated by technical analysis and as constrained by financial and personnel resources." In practice, these Guidelines, coupled with the Recommended Guidelines for Safety Inspection of Dams (Corps of Engineers, 1974) and subsequent DoI orders and memoranda, require that existing dams be brought up to and maintained at safe operating standards. This may require repairs so that the dam is structurally sound by reasonable standards (usually involves fairly clear-cut requirements) and/or correction of design or construction deficiencies (often involves a judgment decision).

Repair needs are manifested by a variety of conditions that indicate the structural integrity of a given dam is impaired or will be impaired absent remedial attention. These needs may include seepage through the dam (the principal cause of failure of dams built in the U.S. since 1930 and the number one repair need on FWS dams), slope instability, damage to outlet works, concrete deterioration, embankment deformation or settlement, and others.

Assessment of needs related to correction of design or construction deficiencies is somewhat more nebulous. Deficiencies may include such problems as inadequate capacity of low-level outlets, failure to meet freeboard requirements (distance between the top of the dam and normal pool level), and most commonly, incapacity of the spillway to pass the Spillway Design Flood (SDF). The SDF is the flood flow which the dam should be designed to pass; the CoE inspection guidelines include recommendations of SDF for dams of various size and hazard classification. The SDF may range from a certain percentage of a 100-year flood to a Probable Maximum Flood (PMF), depending on the classification. The PMF is defined as the most "severe combination of meterologic and hydrologic conditions that are reasonably possible in the region" (from Bureau of Reclamation guidelines for safety evaluations).

The SEED inspections are based on the SDF recommendations in the CoE guidelines. Several FWS high and significant hazard dams were built in the 1930s and 40s prior to the present dam safety standards. Although structurally sound, they have spillways that do not carry a PMF, the recommended SDF for this class of dam. As a result, the SEED reports have tentatively placed these dams in the Priority 1 repair category because the spillways do not meet SDF guidelines.

Because the SDF guidelines for existing dams are recommendations and not absolute mandated requirements (unlike new dams which must be designed to pass the PMF), there is room for judgment in determining what spillway modifications must be undertaken. This judgment includes whether or not a reduction factor can appropriately be applied to the PMF (as suggested by the CoE guidelines). Also, alternatives to full or partial spillway modification may be considered. This may include such things as installation of warning devices, reduced pool levels, modification or stabilization of the dam slope, or a decision (if legally permissible and operationally possible) to drain the pool or perhaps breach the dam.

The FY 1987 construction request includes a dam safety funding level of $2,790,000. This includes $340,000 for continuation of required dam reinspections and $2,450,000 for implementing certain high-priority repairs or planning and design of repairs. Of the four dams recommended for repairs or planning/design, two are classified as high hazard and two are classified as significant hazard dams. The Service is studying possible alternatives in regard to a number of other Service dams to ensure conformance with the intent of the Federal dam safety program.

ADVANCE PLANNING

In FY 1984 the Service initiated a Construction, Rehabilitation, and Maintenance System (CRMS) to address construction program deficiencies and to support design and implementation of a computerized system for identifying and managing maintenance and capital development needs. Servicewide maintenance and rehabilitation needs, based on the programmatic priorities, are being identified and integrated with the objective of enabling longer range planning, more effective scheduling of construction needs, and better management of construction and maintenance dollars. Included as part of the CRMS is an Advanced Project Planning (APP) capability to provide engineering information on proposed future construction projects to ensure that requested projects are feasible and to establish reliable engineering cost estimates and related construction data for planning purposes and development of annual budget submissions.

In 1985, the Department accepted a Service management study prepared in conjunction with A-76 reviews of the Service's engineering design and construction management functions. Several recommendations resulting from this study were that the Service should agressively pursue acquisition of more technologically advanced engineering equipment now available in the commercial market in order the increase the efficiency of its engineering function, and use standardized designs for Service facilities where applicable. Acquisition of computer aided drafting and design (CADD) systems would be a major step in meeting these objectives and increasing productivity. An independent consultant's evaluation of the Service's engineering workload established that procurement of CADD systems has an estimated cost benefit ratio of 6.12 to 1, and that the investment could be recovered in 2.5 years through increased productivity. Because of the number of advanced planning projects that have been completed over the last several years and the likelihood of very limited construction funds for the next several years due to the general budgetary climate, the Service proposes to use the advanced planning funds requested for FY 1987 to initiate acquisition of CADD systems for its engineering offices.

SUMMARY OF FY 1987 CONSTRUCTION PROJECTS
Budget Authority

State Station Project Description	Total Estimated Cost	Available Through FY 1986	FY 1987 Request
DAM SAFETY			
ILLINOIS			
Crab Orchard Dam, Crab Orchard NWR. Final design for spillway rehabilitation.	8,550,000	386,000	660,000
Little Grassy Dam, Crab Orchard NWR. Final design for spillway rehabilitation.	6,500,000	293,000	540,000
Subtotal, ILLINOIS			$1,200,000
TEXAS			
Umbarger Dam, Buffalo Lake NWR. Dam modification	1,806,000	806,000	1,000,000
Subtotal, TEXAS			$1,000,000
WISCONSIN			
Rynearson Dam #1, Necedah NWR. Remedial modification.	294,000	44,000	250,000
Subtotal, WISCONSIN			$250,000
Servicewide Dam Inspections and Emergency Action Plans Continuation of biennial dam inspections and preparation of emergency action plans for significant hazard dams as required under the Federal dam safety guidelines.			340,000
TOTAL, DAM SAFETY			$2,790,000
ADVANCE PLANNING			
Servicewide Procurement of computer-aided drafting/design equipment, software and, training.			$323,000
TOTAL REQUEST FOR CONSTRUCTION AND REHABILITATION			$3,113,000

U.S. FISH AND WILDLIFE SERVICE
FISCAL YEAR 1987 CONSTRUCTION PROGRAM

DAM SAFETY: Crab Orchard NWR, IL

REGION: 3 (Twin Cities, MN)

PROJECT TITLE: Crab Orchard Dam

PROJECT DETAIL:

	($000 estimates)	
	FY 1987	Future
Final design for spillway rehab	660.0	7,500.0*

PROJECT SCHEDULE:

Project start:	October 1986
Project completion:	September 1988

PROJECT JUSTIFICATION:

Project Description: The work to be accomplished under this project is the completion of the final design and specifications for embankment dams, spillways and outlet works. This includes completion of data collection, soil testing, surveys, a technical review and all drafting work. Preliminary planning was completed in FY 1984 under contract with the Bureau of Reclamation. The first stage of the design work was funded in FY 1985 and is also under contract with the Bureau of Reclamation.

Project Need: Crab Orchard Dam is a high hazard class dam. In the event of failure, there would be considerable threat to human life and safety.

Crab Orchard Dam was built in 1938. In 1978, the Bureau of Reclamation performed in-depth safety evaluation of the structure. In 1982, the FWS completed a SEED investigation of this dam. The final reports identified numerous deficiencies and are the basis for the rehabilitation work proposed. The major deficiency is that the existing spillway will not handle a maximum probable flood without overtopping of the dam resulting in probable failure.

The consequences downstream of dam failure would be severe as considerable property damage and loss of life could occur. Major wildlife refuge benefits would also be lost. Crab Orchard refuge is located in a seismic area classified as Zone 3 (highest rating possible is Zone 4). It is the most seismically active area in the Midwest; however, there is no evidence that active faulting has taken place in the past at the dam site.

The rehabilitation of this dam is a Priority 1 recommendation from the 1982 SEED investigation and report.

*Cost estimates based on information derived during preliminary planning.

U.S. FISH AND WILDLIFE SERVICE
FISCAL YEAR 1987 CONSTRUCTION PROGRAM

DAM SAFETY: Crab Orchard NWR, IL

REGION: 3 (Twin Cities, MN)

PROJECT TITLE: Little Grassy Dam

PROJECT DETAIL:

	($000 estimates)	
	FY 1987	Future
Final design for spillway rehabilitation	540.0	5,625.0*

PROJECT SCHEDULE:

Project start: October 1986
Project completion: September 1988

PROJECT JUSTIFICATION:

Project Description: The work to be accomplished under this project is the completion of the final design and specifications for embankment dams, spillways and outlet works. This includes completion of data collection, soil testing, surveys, a technical review and all drafting work. Preliminary planning was completed in FY 1984 under contract with the Bureau of Reclamation. The first stage of the design work was funded in FY 1985 and is also under contract with the Bureau of Reclamation.

Project Need: Little Grassy Dam is a significant hazard class dam. There is a possibility of some loss of human life in the event of failure.

Little Grassy Dam was built in 1943. In 1978, the Bureau of Reclamation performed an in-depth safety evaluation of the structure. In 1982, a SEED investigation of the dam was completed. The final reports identified numerous deficiencies and are the basis for the rehabilitation work proposed. The major deficiency is that the existing spillway will not handle a maximum probable flood without overtopping of the dam and resulting in probable failure.

The consequences downstream of dam failure would be severe as considerable property damage and some loss of life could occur. Major refuge wildlife benefits would also be lost. Crab Orchard refuge is located in a seismic area classified as Zone 3 (highest rating possible is Zone 4). It is the most seismically active area in the Midwest; however, there is no evidence that active faulting has taken place in the past at the dam site.

The rehabilitation of this dam is a Priority 1 recommendation from the 1982 SEED investigation on this dam.

*Cost estimates based on information derived during preliminary planning.

U.S. FISH AND WILDLIFE SERVICE
FISCAL YEAR 1987 CONSTRUCTION PROGRAM

DAM SAFETY: Buffalo Lake NWR, TX

REGION: 2 (Albuquerque, NM)

PROJECT TITLE: Umbarger Dam

PROJECT DETAIL:

	($000 estimates)	
	FY 1987	Future
Dam modification	1,000.0*	0

PROJECT SCHEDULE:

Project start: March 1987
Project completion: September 1989

PROJECT JUSTIFICATION:

Project Description: The work to be accomplished under this project includes lowering the existing dam to a maximum height of 12 feet, removing the unsafe spillway, disposing of the waste material from the dam by raising County Road 168, and constructing two additional waterfowl impoundments upstream.

Project Need: Umbarger Dam presents a high hazard to downstream public occupancy and the town of Canyon, Texas, based on failure analysis and hydrological studies conducted by Corps of Engineers and Bureau of Reclamation. The dam has been placed in the highest hazard class under the dam safety criteria.

The SEED report was completed by the Bureau of Reclamation in May 1984 and revealed an inadequate and deteriorated concrete spillway, minor toe seepage, and potential failure by breaching and spillway washout if the "Probable Maximum Flood" occurs.

The Service has evaluated several alternatives, all of which would bring Umbarger Dam into compliance with current dam safety guidelines, and believes the best course of action is to modify the dam. Annual inflow to Buffalo Lake NWR has substantially decreased in the last 10-15 years because of changing agricultural practices in the upstream area, and because of this the lake has become less important to waterfowl management. The modification would create a total of four manageable pools for waterfowl, contain sediments, and nutrients behind the dam, and provide downstream flood protection.

*Cost estimates based on standard design and escalated to 1987.

U.S. FISH AND WILDLIFE SERVICE
FISCAL YEAR 1987 CONSTRUCTION PROGRAM

DAM SAFETY: Necedah NWR, WI

REGION: 3 (Twin Cities, MN)

PROJECT TITLE: Rynearson Dam #1

PROJECT DETAIL:

	($000 estimates) FY 1987	Future
Remedial modification	250.0*	0

PROJECT SCHEDULE:

Project start: November 1986
Project completion: September 1987

PROJECT JUSTIFICATION:

Project Description: Work to be accomplished under this project includes all remedial repairs necessary to rehabilitate this dam.

Project Need: Rynearson Dam #1 is a significant hazard class dam. There is a possibility of some loss of human life in the event of failure.

Rynearson Pool #1 is one of the two major pools on the refuge. It is critical for water management, but it cannot be used at this time because of the deteriorated condition of the dam (Rynearson Dam #1). The initial SEED investigation conducted in May 1982, identified numerous deficiencies in the dam, including foundation problems, piping problems and severe settlement adjacent to the control structure. Advance Planning funds provided in FY 1985 will be used for planning and design work.

The repair of this dam is a Priority 1 recommendation from the SEED investigation on this dam.

*Cost estimates based on information derived during advance planning.

U.S. FISH AND WILDLIFE SERVICE
FISCAL YEAR 1987 CONSTRUCTION PROGRAM

DAM SAFETY: Dam Inspections

REGION: Nationwide

PROJECT TITLE: Inspection of dams.

PROJECT DETAIL:

	($000 estimates)	
	FY 1987	Future
Dam inspections	340.0	(continued) annually

PROJECT SCHEDULE:

Project start: October 1986
Project completion: September 1987

PROJECT JUSTIFICATION: In order to continue to meet the requirements of Secretarial Order No. 3048, and the President's memorandum of October 4, 1979, the Service must conduct investigations of the Service dams which were initially inspected in FY 1982 and FY 1983 as part of the required biennial inspection procedure. Seventy-five dams will be reinspected (both intermediate 2-year and formal 4-year reinspections will be conducted).

U.S. FISH AND WILDLIFE SERVICE
FISCAL YEAR 1987 CONSTRUCTION PROGRAM

Advance Planning

PROPROSAL: Improve productivity in the area of advanced planning through procurement of technologically advanced Computer-Aided Drafting/Design (CADD) equipment, identified in a management study of the Service's engineering organization.

REQUESTED FUNDING: $323,000

JUSTIFICATION: The Service completed a management study of its engineering design and construction management function that is now being implemented. This analysis included a recommendation that procurement and use of more technologically advanced equipment would improve productivity and work output. To verify the integrity of this recommendation, the Service retained an independent consulting firm, Data Trak and Demand, Incorporated, to complete a study of Computer-Aided Drafting/Design (CADD) applications, and its cost effectiveness. An indepth analysis of Service workloads, operations, and current work methods revealed that the procurement and use of such equipment would have an extremely favorable cost benefit ratio of 6.12 and a payback period of 2.5 years. The analysis included all costs relating to hardware, software, maintenance, and training.

A CADD system will provide the ability to realize wider and more consistent use of standardized engineering designs between regions, result in significant time-savings in completing site-adapted designs, allow for more cost-effective preparation of as-built drawings, and greatly improve technician and drafting productivity.

The requested funding will be used to initiate acquisition of a CADD system for the Service's engineering offices at an estimated cost of $50,000 per work station. This includes necessary hardware, software, installation, and training.

BENEFITS:

Procurement of CADD equipment will provide design cost savings and improve productivity. It also will assist in mitigating the loss of output associated with the reduction of 42 engineering FTEs in FY 1987.

Justification of Program and Performance

Activity: Anadromous Fish Conservation Act Grants-in-Aid

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc.(+) Dec.(-) From Base
Grants to States	$	1,416	1,356	1,416	0	-1,416
Grant Administration	$	75	71	75	0	-75
	(FTE)	(0)	(0)	(0)	(0)	(0)
Emergency Striped Bass Study	$	497	476	497	0	-497
Total Requirements	$	1,988	1,903	1,988	0	-1,988
	(FTE)	(0)	(0)	(0)	(0)	(0)

Gramm-Rudman-Hollings Impact:

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Grants to States	1,416	-60	1,356
Grant Administration	75	-4	71
Emergency Striped Bass Study	497	-21	476
Total	1,988	-85	1,903

As a result of the $85,000 P.L. 99-177 reduction, projects grants to States will be reduced by $60,000. This will be achieved by not funding $60,000 of the lowest priority project proposals submitted by the States. The $4,000 reduction in grant administration will be accommodated by reducing travel, technical engineering services/review, and general project monitoring. The reduction of $21,000 for the Striped Bass Study will result in eliminating less essential research activities.

Authorization: 16 U.S.C., 757a-757g, Anadromous Fish Conservation Act - Authorizes the Secretary of the Interior to enter into cooperative agreements with and provide grants to the States and certain other non-Federal interests for conservation, development, and enhancement of the Nation's anadromous fish resources, including fish in the Great Lakes and Lake Champlain that ascend streams to spawn. The Act is administered jointly with the National Marine Fisheries Service.

[illegible]

Objective: To restore, conserve and enhance anadromous fishery resources of the Nation, and the fish of the Great Lakes and Lake Champlain that ascend streams to spawn.

Program Description: The Anadromous Fish Conservation Program provides financial grants to the States and other non-Federal entities for projects that contribute to the purposes of the Act. Funds are appropriated to the Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) of the Departments of Interior and Commerce, respectively, which administer the state grant program. The FWS and the NMFS cooperate closely in developing resource objectives and project criteria and in overall administration of the program.

The Federal cost-sharing formula for Anadromous Fish Conservation Act grants is as follows:

Up to 50% Federal funding for single projects undertaken by individual states.

Up to 66 2/3% (two thirds) Federal funding for multistate projects that entail coordination among 2 or more states and address common concerns.

Up to 90% Federal funding for interstate projects undertaken to implement resource plans developed by the Marine Fisheries Commissions (Atlantic States Marine Fisheries Commission; Gulf States Marine Fisheries Commission; Pacific States Marine Fisheries Commission).

State Grant funds can be used for construction, research, production, facility operation and maintenance, coordination, and planning. The principal species of anadromous fish included in this program are coho and chinook salmon, steelhead trout, Atlantic salmon, striped bass, river herring, and American shad. In FY 1976, Congress amended the Anadromous Fish Conservation Act to include Lake Champlain.

Grant Administration funds are used at the Washington and regional levels of the Service for national planning and coordination, technical project review and approval, budget execution, and coordination of project development and implementation. No FTE requirement is identified for grant administration because this work has been handled as collateral duties by personnel in the Washington and Regional offices, with no adverse impact on the grant process or program.

Section 7 of the Anadromous Fish Conservation Act authorized the Emergency Striped Bass Study in FY 1980 to determine causes of drastic declines of the striped bass populations of the mid Atlantic coast. The study is a cooperative effort, with the Fish and Wildlife Service and the National Marine Fisheries Service each providing funding. Projects include investigations on the effects of contaminants on striped bass, factors affecting striped bass fish reproduction, the role of fishing mortality in striped bass population declines, identification of major producers of juvenile striped bass, and the predator-prey relationships of striped bass and other fish species.

[illegible]

[illegible]

[illegible]		[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONSTRUCTION

Program and financing (in thousands of dollars)

Identification code 14-1612-0-1-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
Construction and rehabilitation:			
00.01 Refuges	7077	20897	7254
00.02 Hatcheries	2488	3072	2584
00.03 Fishery research facilities	634	5225	3191
00.04 Dam safety	744	2819	2411
00.05 Wildlife research facilities	2741	493	161
00.06 Construction, rehabilitation and maintenance planning	793	1388	922
00.07 Anadromous fish	4541	2300	175
10.00 Total obligations	19018	36194	16698
Financing:			
17.00 Recovery of prior year obligations	-149	-150	-150
21.40 Unobligated balance available, start of year	-31426	-40815	-25939
24.40 Unobligated balance available, end of year	40815	25939	12504
39.00 Budget authority	28258	21168	3113
Budget Authority:			
40.00 Appropriation	24258	21296	3113
40.00 Reduction pursuant to P.L. 99-190		-128	
42.00 Transferred from other accounts	4000		
43.00 Appropriation (adjusted)	28258	21168	3113

Type size:
8 point 22 picas
Case 180
Red underscore
Case 310

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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONSTRUCTION

Program and financing (in thousands of dollars)

Identification code 14-1612-0-1-303	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays:			
71.00 Obligations incurred, net	19018	36194	16698
72.40 Obligated balance, start of year	18459	15571	25104
74.40 Obligated balance, end of year	-15571	-25104	-14081
78.00 Adjustments in unexpired accounts	-149	-150	-150
90.00 Outlays	21757	26511	27571
(Memo cast: 28.8)	(Memo cast: 8)	(Memo cast: 8)	(Memo cast: 4.8)

GPO : 1971 O - 443-317

Type size: 8 point 10 picas
Case 180
Red underscore
Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONSTRUCTION

Object Classification (in thousands of dollars)

Identification code 14-1612-0-1-303	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation:			
11.1 Full-time permanent	1887	1887	1887
11.3 Other than full-time permanent	292	1070	463
11.5 Other personnel compensation	36	53	53
11.9 Total personnel compensation	2215	3010	2403
12.1 personnel benefits: civilian	307	476	380
13.1 Benefits for former personnel	27		
21.0 Travel and transportation of persons	320	726	124
22.0 Transportation of things	12	38	40
23.2 Communications, utilities, and other rent	61	208	216
24.0 Printing and reproduction	27	63	27
25.0 Other services	6259	6250	5006
26.0 Supplies and materials	669	422	456
31.0 Equipment	680	1310	1416
32.0 Lands and structures	5009	19391	6445
41.0 Grants, subsidies, and contributions	3432	2300	175
99.9 Total obligations	19018	36194	16695

FWS-216

(Memo cost: 21.8) (Memo cost: 8) (Memo cost: 8) (Memo cost: 4.8)

Type size: 8 point 25 picas Case 189 Rod underscore Case 210

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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONSTRUCTION
PERSONNEL SUMMARY

Identification code 14-1612-0-1-303	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	64	64	64
Total compensable workyears:			
Full-time equivalent employment	146	138	96
Full-time equivalent of overtime and holiday hours	2	2	2
Average GS grade	9.58	9.54	9.55
Average GS salary	29374	29374	29374
Average salary of ungraded positions	22550	22550	22550
(Memo amt: 31.8)	(Memo amt: 8)	(Memo amt: 8)	(Memo amt: 4.8)

Type size: 8 point 22 picas Char 185 Red underscore Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONSTRUCTION (Pursuant to P.L. 99-177)

Program and financing (in thousands of dollars)

Identification code 14-1612-6-1-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
Construction and rehabilitation:			
00.01 Refuges			
00.02 Hatcheries			
00.03 Fishery research facilities			
00.04 Dam safety			
00.05 Wildlife research facilities			
00.06 Construction, rehabilitation and maintenance planning			
00.07 Anadromous fish			
10.00 Total obligations		-910	
Financing:			
17.00 Recovery of prior year obligations			
21.40 Unobligated balance available, start of year			
24.40 Unobligated balance available, end of year			
39.00 Budget authority			
Budget Authority:			
40.00 Appropriation			
40.00 Reduction pursuant to P.L. 99-177		-910	
42.00 Transferred from other accounts			
43.00 Appropriation (adjusted)		-910	
(Memo cost: 21.8)	(Memo cost: 8)	(Memo cost: 8)	(Memo cost: 4.8)

FWS-218

Type size:
8 point 22 picas
Case 100
Red underscore
Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONSTRUCTION (Pursuant to P.L. 99-177)

Program and financing (in thousands of dollars)

Identification code 14-1612-6-1-303	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays:			
71.00 Obligations incurred, net		-910	
72.40 Obligated balance, start of year			-723
74.40 Obligated balance, end of year		723	
78.00 Adjustments in unexpired accounts			
90.00 Outlays		-187	-723

(Mono cast: 21.0)	(Mono cast: 8)	(Mono cast: 5)	(Mono cast: 4.8)

Type size: 8 point 28 picas Case 180 Red underscore Case 300

STANDARD FORM 300
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Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONSTRUCTION (Pursuant to P.L. 99-177)

Object Classification (in thousands of dollars)

Identification code 14-1612-6-1-303	19 85 actual	19 86 estimate	19 87 estimate
92.0 Undistributed		-910	

(Mono cast: 21.5) (Mono cast: 8) (Mono cast: 8) (Mono cast: 4.9)

Appropriation Summary Statement

Appropriation: Land Acquisition

The primary purpose of the land acquisition program funded through this appropriation is to protect important fish and wildlife habitat for preservation and recovery of listed endangered and threatened species and other important wildlife and plant species, and for public use and enjoyment. Acquisition of lands, waters, or interests therein specifically or generally authorized by Acts of Congress are accomplished when no alternatives to acquisition is available to meet the protection and preservation objectives.

The request will support the on going acquisition program with funding for the staff and technical and administrative costs required to complete obligations of previous appropriations. No funds have been requested for new land acquisition.

Land Acquisition

For expenses necessary to carry out the provisions of the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 4601-4-11), including administrative expenses, and for acquisition of land or waters, or interest therein in accordance with statutory authority applicable to the United States Fish and Wildlife Service. [$40,670,000] $1,500,000, to be derived from the Land and Water Conservation Fund, to remain available until expended.

(Department of the Interior and Related Agencies Appropriations Act 1986, as inluded in Public Law 99-190.)

Appropriation Language Citation

Fish and Wildlife Service

Appropriation: Land Acquisition

For expenses necessary to carry out the provisions of the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 4601-4-11), including administrative expenses, and for acquisition of land or waters, or interest therein, in accordance with statutory authority applicable to the United States Fish and Wildlife Service, [$40,670,000] $1,500,000, to be derived from the Land and Water Conservation Fund, to remain available until expended.

Appropriation language citations and explanations

16 U.S.C. 460k-1
16 U.S.C. 460ℓ-4-11
16 U.S.C. 715 et. seq
16 U.S.C. 1534

16 U.S.C. 460k-1 The Recreation Use of Conservation Areas Act of 1962, as amended, authorizes acquisition of areas which are adjacent to, or within existing fish and wildlife conservation areas administered by the Department of the Interior and suitable for (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of listed threatened or endangered species, or (4) carrying out two or more of the above.

16 U.S.C. 460ℓ-4-11 The Land and Water Conservation Fund Act of 1965, as amended, provides funding authority for appropriation to the Fish and Wildlife Service to acquire land, waters, or interests in land or waters as otherwise authorized by law.

16 U.S.C. 715 et. seq The Fish and Wildlife Act of 1956, as amended (16 U.S.C. 742f-a-5), authorizes acquisition of Refuge lands for the development, management, advancement, conservation, and protection of wildlife resources except migratory waterfowl areas which are authorized to be acquired by the Migratory Bird Conservation Act of 1929, as amended.

16 U.S.C. 1534 The Endangered Species Act of 1973 authorizes the acquisition of lands, waters, or interstate therein for the conservation of listed fish, wildlife and plants including those which are listed as endangered or threatened species with Land and Water Conservation Funds.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Land Acquisition	FTE/T	Amount	FTE/T	Amount
Appropriation anticipated to date 1986	...	...	58	40,426
P.L. 99.177 Reduction	...	...	...	-1,738
Adjusted Appropriation	...	...	58	38,688
Adjustments to base	...	...	...	...
Adjustment for 1986 impact of P.L. 99-177	...	1,738	...	...
Other adjustments	...	-40,426	...	...
Subtotal, adjustments to base	...	...	...	-38,688
FY-1987 Base Budget				
Program changes (Changes to base budget, detailed below)	...	...	-8	1,500
Total Requirements (1987 Estimate)	...	...	...	1,500

Comparison by Activity/Subactivity

Comparison by activity/ Subactivity	1985 Approp. FTE/T	1985 Approp. Amount	1986 Adjusted Appropriation FTE/T	1986 Adjusted Appropriation Amount	1987 Base FTE/T	1987 Base Amount	1987 Estimate FTE/T	1987 Estimate Amount	FY 1987 Change from the FY 1986 Appropriation FTE/T	FY 1987 Change from the FY 1986 Appropriation Amount	FY 1987 Change from FY 1987 Base FTE/T	FY 1987 Change from FY 1987 Base Amount
Acquisition Management	96	1,470	58	1,522	50	...	50	1,500	-8	-22	...	1,500
Specifically Legislated	...	15,820	...	3,834	...	...	...	...	...	-3,834	...	...
Endangered Species Act	...	31,605	...	16,647	...	...	...	...	...	-16,647	...	...
Refuge Recreation Act	...	1,666	...	5,518	...	...	...	...	...	-5,518	...	...
Fish and Wildlife Act	...	19,657	...	10,216	...	...	...	...	...	-10,216	...	...
In Holdings	...	...	...	951	...	...	...	...	...	-951	...	...
Total, Appropriation	63	70,218	58	38,688	50	...	50	1,500	-8	-37,188	...	1,500

Justification of Program and Performance

Activity: Land Acquisition

(Dollar Amounts in Thousands)

		1986 Enacted To date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Federal Refuge Lands:						
Endangered Species Act		17,395	16,647	0	0	0
Fish and Wildlife Act		8,051	7,705	0	0	0
Refuge Recreation Use Act		8,390	8,029	0	0	0
Specifically Legislated		4,006	3,834	0	0	0
Inholdings		994	951	0	0	0
Subtotal	($)	38,836	37,166	0		0
Acquisition Management		1,590	1,522	0	1,500	+1,500
Subtotal	($)	1,590	1,522	0	1,500	+1,500
	(FTE-T)	(58)	(58)	(58)	(50)	(-8)
TOTAL, Federal Acquisition	($)	40,426	38,688	0	1,500	+1,500
	(FTE-T)	(58)	(58)	(58)	(50)	(-8)

Gramm-Rudman-Hollings Impact

1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
40,426	1,738	38,688

As a result of the $1.738 million P.L. 99-177 reduction, each Federal refuge project acquisition has been reduced by 4.3 percent. This reduction, across the board, only presents acquisition problems where the enacted amount equals the purchase price. In order to purchase land in such circumstances less acreage will be purchased or funds may be reprogrammed from other active land acquisition projects.

Federal Refuge Lands

Authorization: 16 U.S.C. 460k-4-11, The Land and Water Conservation Fund Act of 1965, as amended, provides funding authority for appropriations to the Fish and Wildlife Service to acquire land, waters, or interests in land or waters as otherwise authorized by law. Congress has specifically authorized the acquisition of the following national wildlife refuges:

Tinicum, PA (P.L. 92-326, 86 Stat. 391, as amended)
San Francisco Bay, CA (P.L. 92-330, 86 Stat. 399, as amended)
Great Dismal Swamp, NC and VA (P.L. 93-402, 86 Stat. 793)

Minnesota Valley, MN (P.L. 94-466, 90 Stat. 1993)
Bon Secour, AL (P.L. 96-267, 94 Stat. 483)
Tensas, LA (P.L. 96-285, 94 Stat. 595)
Bogue Chitto, LA (P.L. 96-288, 94 Stat. 603)
Alaska Maritime, AK (P.L. 96-487, 94 Stat. 2501)
Bandon Marsh, OR (P.L. 97-137, 95 Stat. 1709)
Protection Island, WA (P.L. 97-333, 96 Stat. 1623)
Atchafalaya, LA (P.L. 98-548, 98 Stat. 2774)
Connecticut Coastal, CT (P.L. 98-548, 98 Stat. 2774)

The Endangered Species Act of 1973 (16 U.S.C. 1534) authorizes the acquisition of lands, waters, or interests therein for the conservation of listed fish, wildlife and plants, including those which are listed as endangered or threatened species, with Land and Water Conservation Fund Act funds.

The Fish and Wildlife Act of 1956, as amended (16 U.S.C. 742f-a-5) authorizes acquisition of additions to the National Wildlife Refuge System for the development, management, advancement, conservation, and protection of wildlife resources.

The Recreational Use of Conservation Areas Act of 1962, as amended (16 U.S.C. 460k-1) authorizes acquisition of areas which are adjacent to, or within, existing fish and wildlife conservation areas administered by the Department of the Interior, and suitable for (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of listed threatened or endangered species, or (4) carrying out two or more of the above.

Objectives: To protect fish and wildlife habitat for public use and enjoyment, and for wildlife conservation purposes by acquiring lands, waters, or interests therein as authorized by Acts of Congress and in accordance with policies and procedures prescribed by Congress in the authorizing legislation.

Current Program: The Fish and Wildlife Service acquires, through appropriated funds, lands and waters and interests therein which aid in meeting the objectives of several Service programs. Emphasis is placed on acquiring important

fish and wildlife habitat specifically authorized by Acts of Congress, habitat for the conservation of listed endangered and threatened species, and additions to existing national wildlife refuges.

Acquisition management funds are used to plan and evaluate future acquisitions, complete exchanges, and conduct appraisals, negotiations, title examinations, surveys, and other necessary acquisition functions.

The Service's basic policy is to acquire land only when other means (regulatory controls such as zoning, permits, and ordinances or leasing) of achieving program goals and objectives are not appropriate, available, or effective. When lands are to be purchased the minimum interests necessary to reach management objectives are acquired. If fee title acquisition is required, full consideration is given to extended use reservations, exchanges, or other alternatives that will lessen the impact on the owner and the community.

Donations of fish and wildlife habitat or interests therein are also encouraged and accepted when they contribute to meeting objectives.

Standard Service procedure is to schedule appraisals in the fiscal year preceding acquisition. This ensures the most efficient utilization of personnel and monetary resources.

Acquisition Management, FY 1987 Program, $1,500,000 (50 FTE-T):

During the past few years, considerable resources have been made available to the Service for land acquisition; between FY 1981 and 1985, $151.6 million has been obligated from the Land and Water Conservation Fund (LWCF) to acquire 298,000 acres of refuge lands and wildlife habitat. In FY 1986, $38.7 million was provided to continue these acquisitions. The FY 1987 budget includes $1.5 million to complete LWCF acquisitions with carryover funds and to actively pursue cooperative agreements, exchanges, donations, and other non-acquisition alternatives. Prior-year funding carried over into FY 1987 will likely represent those complicated projects involving more time than usual to acquire.

Fifty FTEs will be sufficient to handle and process the anticipated FY 1987 workload based on prior-year carryover and an emphasized non-acquisition habitat protection program utilizing such instruments as cooperative agreements and exchanges.

Summary of Requirement by Object Class

(Dollar amounts in thousands)

Appropriation: Land Acquisition	1987 Base		1987 Estimate		Inc(+)/Dec(-)	
	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount
Object Class						
11. Personnel Compensation						
11.1 Personnel Positions	48	...	48	1,414	...	1,414
11.3 Positions Other Than Permanent	2	...	2	29	...	29
11.5 Other Personnel Compensation	...	...	...	27	...	27
Total Personnel Compensation	50	...	50	1,470	...	1,470
Other Object Classes						
12.1 Personnel Benefits	...	...	...	30 1/	...	30
Total Requirements	...	...	...	1,500	...	1,500

1/ Additional benefits of $202,000 will be funded with carryover dollars.

Type size:
8 point 22 picas
Case 100
Red underscore
Case 200

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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION

Program and financing (in thousands of dollars)

Identification code 14-5020-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
1. Acquisition management	1554	1542	1455
2. Specifically legislated	26316	7983	9772
3. Endangered Species Act	38480	16542	15374
4. Refuge recreation	813	4854	2306
5. Fish & Wildlife Act	10745	4831	7505
6. Inholdings		994	
10.00 Total obligations	77908	36746	36412
Financing:			
17.00 Recovery of prior year obligations	-969		
21.40 Unobligated balance available, start of year	-39112	-32391	-36071
24.40 Unobligated balance available, end of year	32391	36071	1159
39.00 Budget authority	70218	40426	1500
Budget authority:			
40.00 Appropriation	64218	40670	1500
40.00 Reduction pursuant to P.L. 99-190		-244	
42.00 Transferred from other accounts	6000		
43.00 Appropriation (adjusted)	70218	40426	1500

FWS-229

(Memo amt: 21.8) (Memo amt: 8) (Memo amt: 8) (Memo amt: 4.8)

Type size: 8 point 20 picas Case 160 Red underscore Case 210

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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION

Program and financing (in thousands of dollars)

Identification code 14-5020-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Relations of obligations to outlays:			
71.00 Obligations incurred, net	77908	36746	36412
72.40 Obligated balance, start of year	8872	28484	13517
74.40 Obligated balance, end of year	-28484	-13517	-1617
78.00 Adjustments in unexpired accounts	-969		
90.00 Outlays	57326	51713	48312

FWS-230

(Mono cast: 21.8) (Mono cast: 8) (Mono cast: 8) (Mono cast: 4.8)

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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION

Object classification (in thousands of dollars)

Identification code 14-5020-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation:			
11.1 Full-time permanent	2302	1414	1414
11.3 Other than full-time permanent	103	145	29
11.5 Other personnel compensarion	16	27	27
11.9 Total personnel compensation	2421	1586	1470
12.1 Personnel benefits: Civilian	476	368	232
21.1 Travel and transportation of persons	239	75	66
22.0 Transportation of things	61	50	52
23.2 Communications, utilities and other rent	22	22	22
24.0 Printing and reproduction	21	25	26
25.0 Other services	1379	1379	1436
26.0 Supplies and materials	105	105	109
31.0 Equipment	127	127	132
32.0 Lands and structures	73057	33009	32866
99.9 Total obligations	77908	36746	36412

FWS-231

(Memo amt: 11.5)	(Memo amt: 2)	(Memo amt: 5)	(Memo amt: 4.9)

Type size: 8 point 20 picas Case 190 Red underscore Case 230

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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION
PERSONNEL SUMMARY

Identification code 14-5020-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	78	48	48
Total compensable workyears			
Full-time equivalent employment	78	58	50
Full-time equivalent of overtime and holiday hours	1	1	1
Average GS grade	9.58	9.54	9.55
Average GS salary	29374	29374	29374
Average salary of ungraded positions	22550	22550	22550

FWS-232

(Mono cast: 21.5)	(Mono cast: 5)	(Mono cast: 5)	(Mono cast: 4.9)

Type size: 8 point 22 picas
Caps 180
Red underscore
Caps 210

STANDARD FORM 300
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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION (Pursuant to P.L. 99-177)

Program and financing (in thousands of dollars)

Identification code 14-5020-6-2-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities			
1 Acquisition management			
2 Specifically legislated			
3 Endangered Species Act			
4 Refuge recreation			
5 Fish & Wildlife Act			
6 Inholdings			
10.00 Total obligations		-1378	
Financing			
17.00 Recovery of prior year obligations			
21.40 Unobligated balance available, start of year			
24.40 Unobligated balance available, end of year			
39.00 Budget authority		-1378	
Budget authority			
40.00 Appropriation			
40.00 Reduction pursuant to P.L. 99-177		-1738	
42.00 Transferred from other accounts			
43.00 Appropriation (adjusted)		-1738	
(Memo cast: 21.5)	(Memo cast: 5)	(Memo cast: 5)	(Memo cast: 4.9)

Type size:
8 point 22 picas
Cap. 100
Red underscore
Case 250

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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION (Pursuant to P.L. 99-177)

Program and financing (in thousands of dollars)

Identification code 14-5020-6-2-303	19 85 actual	19 86 estimate	19 8- estimate
Relations of obligations to outlays			
71.00 Obligations incurred, net		-1738	
72.40 Obligated balance, start of year			-825
74.40 Obligated balance, end of year		825	
78.00 Adjustments in unexpired accounts			
90.00 Outlays		-913	-825

(Mono cast: 21.8) (Mono cast: 8) (Mono cast: 8) (Mono cast: 4.9)

Type size: 8 point 22 picas Case 180 Rod underscore Case 250

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION (Pursuant to P.L. 99-177)

Object classification (in thousands of dollars)

Identification code 14-5020-6-2-303	19 85 actual	19 86 estimate	19 87 estimate
92.0 Undistributed		-1738	

FWS-235

(Memo cut: 31.5) (Memo cut: 8) (Memo cut: 8) (Memo cut: 4.9)

Appropriation Summary Statement

Appropriation: Migratory Bird Conservation Account

The primary purpose of the land acquisition program funded from this account is to preserve the habitat needed to maintain international migratory bird resources as required by Federal law and international treaties.

The account is currently funded primarily from two sources: 1) appropriations authorized by the Wetlands Loan Act of October 4, 1961 (16 U.S.C. 715k-3-5, as amended), expiring October 1, 1986; and 2) receipts derived from the sale of duck stamps as authorized by the Migratory Bird Hunting and Conservation Stamp Act of March 18, 1934 (16 U.S.C. 718, as amended). With passage of the Emergency Wetlands Resources Bill, the Wetlands Loan Act advance would be forgiven and the period of authorized appropriations extended for ten years.

The Service anticipates receiving $16,200,000 into the Migratory Bird Conservation Account from the sale of 1.62 million $10.00 duck stamps in FY 1987 based on pending wetlands legislation that would gradually increase the price of the duck stamp from the current price of $7.50. This represents an increase of $2,100,000 above the FY 1986 level. Other receipts to be deposited into the Account are primarily from payments for rights-of-way granted on units of the National Wildlife Refuge System and are estimated to total $300,000. Together, the sources of funding for the Migratory Bird Conservation Account will total $16,500,000.

Migratory Bird Conservation Account

[For an advance to the migratory bird conservation account, as authorized by the Act of October 4, 1971, as amended (16 U.S.C. 715k-3, 5) $15,000,000 to remain available until expended.] (Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Justification of Proposed Language Change

No advance to the Migratory Bird Conservation Account has been requested; therefore, the appropriation language should be deleted.

Appropriation Language citations
Fish and Wildlife Service

Appropriation: Migratory Bird Conservation Account

Appropriation language

[For an advance to the Migratory Bird Conservation Account, as authorized by the Act of October 4, 1971, as amended (16 U.S.C. 715k-3,5) to remain available until expended.]

Appropriation language citations and explanations

16 U.S.C. 668dd-ee
16 U.S.C. 715
16 U.S.C. 715k-3-715-5
16 U.S.C. 718

16 U.S.C. 668dd-ee The National Wildlife Refuge System Administration Act, as amended, requires the payment of fair market value for any right-of-way easement or reservation granted within the refuge system. These funds are to be deposited within the Migratory Bird Conservation Account.

16 U.S.C. 715 as amended, establishes a Migratory Bird Conservation Commission to approve areas recommended for acquisition by the Secretary of the Interior. The Act authorizes the Secretary of the Interior to acquire migratory bird areas approved by the Commission.

16 U.S.C. 715k-3-715-5 the Wetlands Loan Act, as amended, authorizes the appropriation of advances (not to exceed $200 million for the period July 1, 1961 through FY 1986) to accelerate acquisition of migratory waterfowl habitat. The advances are to be repaid using 75 percent of the annual "duck stamp" receipts beginning in FY 1985. Through FY 1986, $189,439 million has been appropriated under this authority. Funds appropriated under the Wetlands Loan Act are merged with receipts from sales of "duck stamps" and made available to theSecretary of the Interior for acquisition of migratory bird habitat under provisions of the Migratory Bird Conservation Act or the Migratory Bird Hunting and Conservation Stamp Act.

16 U.S.C. 718 The Migratory Bird Hunting and Conservaton Stamp Act, as amended, commonly known as the "Duck Stamp Act," requires all waterfowl hunters 16 years of age or older to possess a valid Federal Migratory Bird Hunting and Conservation Stamp. Funds from the sale of this stamp are placed in the migratory bird conservation fund established by this Act. The Act also authorizes the Secretary of the Interior to acquire small wetland and pothole areas, "Waterfowl Protection Areas."

Public Law 98-548 extended the Wetlands Loan Act through September 30, 1986.

Basic authorizing legislation

The Migratory Bird Conservation Act (16 U.S.C. 715), as amended, establishes a Migratory Bird Conservation Commission to approve areas recommended for acquisition by the Secretary of the Interior. The Act authorizes the Secretary of the Interior to acquire migratory bird areas approved by the Commission.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Migratory Bird Conservation Account

	FTE-T	Amount	FTE-T	Amount
Appropriation Currently Available, 1986	...	...	...	29,310
P.L. 99-177 Reduction	...	...	...	-587
Adjusted Appropriation, 1986	...	...	...	28,723
Adjustments to Base:				
Adjustment for 1986 Impact of P.L. 99-177	...	+587	...	...
Advance Appropriation	...	-14,910	...	...
Total Adjustments to Base	...	-14,323	...	...
1987 Base Budget	...	...	...	14,400
Program Changes	...	...	...	...
Total Requirements	...	...	...	14,400

Comparison by Activity/Subactivity
(Dollar amounts in thousands)

Comparison by activity/ Subactivity	1985 Actual		1986 Adjusted Appropriation		1987 Base		1987 Estimate		Inc(+) Dec(-) from 1986 Approp.		Inc(+) Dec(-) From FY 1987 Base	
	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount
Printing and Sale of hunting stamps	...	389	...	400	...	400	...	400	...	...	...	...
Acquisition of refuges and other areas	127	20,616	157	20,323	157	14,000	133	16,100	-24	-12,223	-24	+2,100
Total Requirements	127	21,005	157	20,723	157	14,400	133	16,500	-24	-12,223	-24	+2,100

Justification of Program and Performance

Activity: Migratory Bird Conservation Account

(Dollar Amounts in Thousands)

		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Wetland Loan Fund						
Advance	($)	14,910	14,323	0	0	0
	(FTE-T)	(0)	(0)	(0)	(0)	(0)
Receipts	($)	14,400	14,400	14,400	16,500	+2,100
	(FTE-T)	(157)	(157)	(133)	(133)	(-0)
Total	($)	29,310	28,723	14,400	16,500	+2,100
Requirements	(FTE-T)	(157)	(157)	(133)	(133)	(-0)

Gramm-Rudman-Hollings Impact

1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
29,310	587	28,723

As a result of the $587,000 P.L. 99-177 reduction to the Wetland Loan Advance Fund, the purchase of approximately 1,000 acres of waterfowl habitat will be deferred. Obligational authority of receipts ($674,000) will be carried as an unobligated balance to FY 1987 and will be available for habitat acquisition in future years.

Migratory Bird Conservation Account

Authorization: 16 U.S.C. 715 - The Migratory Bird Conservation Act, as amended. Establishes a Migratory Bird Conservation Commission to approve areas recommended for acquisition by the Secretary of the Interior. The Act authorizes the Secretary of the Interior to acquire migratory bird areas approved by the Commission.

16 U.S.C. 718 - The Migratory Bird Hunting and Conservation Stamp Act, as amended. Commonly known as the "Duck Stamp Act", this law requires all waterfowl hunters 16 years of age or older to possess a valid Federal Migratory Bird Hunting and Conservation Stamp. Funds from the sale of this stamp are placed in the Migratory Bird Conservation Fund established by this Act. The Act also authorizes the Secretary of the Interior to acquire small wetland and pothole areas, "Waterfowl Production Areas."

16 U.S.C. 715k-3 thru 715k-5 - The Wetlands Loan Act, as amended. Authorizes the appropriation of advances (not to exceed $200 million for the period

July 1, 1961 through October 1, 1986) to accelerate acquisition of migratory waterfowl habitat. Through FY 1986, $189,439,000 has been appropriated under this authority. Funds appropriated under the Wetlands Loan Act are merged with receipts from sales of "duck stamps" and made available to the Secretary of the Interior for acquisition of migratory bird habitat under provisions of the Migratory Bird Conservation Act or the Migratory Bird Hunting and Conservation Stamp Act.

16 U.S.C. 668dd-ee - The National Wildlife Refuge System Administration Act, as amended. Requires the payment of fair market value for any right-of-way easement or reservation granted within the Refuge System. These funds are to be deposited within the Migratory Bird Conservation Account.

Objective: To acquire waterfowl breeding, wintering, and migration habitat needed for maintaining optimum migratory bird population levels and for achieving desirable migration and distribution patterns to fulfill national commitments contained in treaties with Canada, Mexico, Japan, and the USSR.

Base Program: The Service acquires important breeding areas, migration resting places, and wintering areas under terms of the Migratory Bird Conservation Act and the Migratory Bird Hunting and Conservation Stamp Act. The areas, acquired in fee, easement, or other interests (leases, cooperative agreements, etc.), become units of the National Wildlife Refuge System.

The Service considers a number of factors before seeking approval for acquisition. The factors include: the value of the habitat to the waterfowl resource (in general or for specific species); the degree of threat to these values due to potential land use changes; and the possibility of preserving habitat values through means other than Service acquisition. It is the Service's policy to acquire land, either in fee or easement, only when other means of preserving habitat are not appropriate, available, or effective.

The Migratory Bird Conservation Commission (MBCC) is responsible for considering and passing upon areas of migratory bird habitat (other than Waterfowl Production Areas) that have been recommended by the Secretary of the Interior and for fixing the price at which such areas may be purchased or rented. It is only after MBCC approval that the Service pursues acquisition of migratory bird refuges.

During the 1950s the Service, States, and International Association of Fish and Wildlife Agencies jointly determined that 12.5 million acres of waterfowl habitat needed to be placed under State and Federal control and managed to maintain waterfowl populations that then existed. The responsibility for acquiring this habitat was split with the Federal share placed at 8 million acres (including 3.5 million already owned). The passage of the Wetlands Loan Act in 1961 provided a source of additional funds for the Migratory Bird Conservation Fund and enabled the Service to increase acquisition of wetlands. The Service determined during 1976 that 1.95 million acres of the Federal portion of waterfowl habitat remained to be acquired and that it should be preserved during a 10-year period between FY 1977 and FY 1986. This would be done to offset accelerated losses and degradation of wetlands and help maintain waterfowl populations at desired levels. The 10-year acquisition objective was divided into 33 habitat categories with acquisition concept plans developed for Categories 1-15. Over the past 9 years the Service has acquired about 435,105 acres of waterfowl habitat.

The previous identification of 33 categories for waterfowl habitat acquisition and State-Federal acquisition goals greatly assisted all entities interested in protecting waterfowl habitat. Much has been accomplished using the 33 categories, but the Service has determined to refocus its acquisition efforts to benefit those waterfowl species most in need of habitat protection. The redescription of waterfowl habitat acquisition categories to support the Service's emphasis on nine waterfowl identified as National Resource Species (black duck, cackling Canada goose, canvasback, mallard, Pacific brant, Pacific white-fronted goose, pintail, redhead, wood duck) is expected to highlight the need for habitat protection to improve the status of these species. State review and input into the Service's proposal has been completed.

Under the revision of the 33-category system, a total of 12 categories will be used (Table 1). The realignment of categories is expected to shape the Service's MBCA acquisition program for the next 10 years. Waterfowl habitat acquisition concept plans will continue to be used as the vehicle to identify and describe individual projects for acquisition; concept plans will be updated (or developed) to reflect new acquisition goals.

Funding is from the Wetlands Loan Act, the sale of duck stamps, and other receipts. During the past 10 years, funds appropriated under the Wetlands Loan Act have varied from $1 million in FY 1975 to $21,000,000 in FY 1985. The receipts from the sale of duck stamps are also annually variable depending upon price of stamps and other factors. The number of stamps sold have declined from 2.5 million in 1971-72 to only 1.8 million sold in 1983-84. Sales of stamps for the 1986-87 duck stamp year are anticipated to drop to approximately 1.6 million stamps due to the first year of the duck stamp price increase. Sales are anticipated to be around 1.9 million stamps for the 1985-1986 stamp year. The variance of 100,000 to 200,000 stamps sold from one year to the next is not unusual. Sales vary depending on waterfowl population levels, bag limits, and economic conditions. Other receipts, primarily from rights-of-way for oil, gas and and electric transmission lines, also vary greatly from one year to the next; for example in FY 1982 receipts totaled nearly $1,246,000 and in FY 1984 receipts totaled $185,942. Rights-of-way receipts are projected at $300,000 during FY 1986. The total receipts for FY 1987 are estimated at $16,500,000 based on the sale of 1.62 million $10.00 (assuming passage of legislation to increase price) duck stamps totaling $16,200,000 and other receipts of $300,000.

Migratory Bird Conservation Account Acquisition Estimates

	1985 Actual		1986 Estimate		1987 Estimate	
	($000)	Acres	($000)	Acres	($000)	Acres
Refuges	22,510	31,337	16,657	17,200	7,216	4,250
Waterfowl Production Areas	12,988	32,917	12,253	19,400	8,884	20,550
Duck Stamp Printing and Distribution	389	---	400	---	400	---
TOTAL	$35,887	64,254	$29,310	36,600	$16,500	24,800

FY 1987 MBCA Program: FY 1987 total proposed acquisitions are shown in Table 1 for a $10.00 duck stamp and other receipts. The primary reasons to proceed with acquisition (through fee and easement) in FY 1987 are to prevent the further loss of wetland habitat and to help improve population levels of certain waterfowl species by habitat preservations.

FY 1987 MBCA Increase: The $16,500,000 receipt estimate includes additional receipts of $2,100,000 based on proposed legislation to increase the price of the duck stamp from $7.50 to $10.00.

Table 1

Fish and Wildlife Service
MBCA Acquisition Needs and Accomplishments

Category/Title/Portions of States Affected	Migratory Bird Species/Population	FY 1977-86 Accomplishments	FY 1987 Proposed Acquisition	
		Acres	Acres	$000
1-Central Valley CA	wood duck pintail Pacific white-fronted goose cackling Canada goose mallard	35,442	1,450	$3,078
2-Prairie Potholes and Parklands ND, SD, MN, IA, MT, WI, MI	canvasback pintail mallard redhead	266,897	19,050	8,434
3-Bottomland Hardwoods LA, TX, MS, AL, AR, OK, TN, KN, MO, IL, IA	wood duck mallard	73,494	1,600	2,156
4-Atlantic Coastal Plain SC, NC, VA, DE, NJ, PA, NY, CT, RI, MA, NH, ME	black duck redhead canvasback	8,871	800	1,175
5-Gulf Coast TX, LA, MS, GA, FL	mallard pintail redhead canvasback	75,293	400	883
6-Alaska Areas (Yukon-Kuskokwim Delta, Yukon Flats, Teshekpuk Lake) AK	Pacific brant cackling Canada goose mallard pintail canvasback Pacific white-fronted goose	0	0	0
7-Intermountain West WY, MT, ID, WA, OR, NV, UT	redhead mallard	4,536	1,500	450

Category/Title/Portions of States Affected	Migratory Bird Species/Population	FY 1977-86 Accomplishments Acres	FY 1987 Proposed Acquisition Acres	FY 1987 Proposed Acquisition $000
8-Playa Lakes CO, NM, TX, OK, KS	mallard pintail	0	0	0
9-Klamath Basin OR, CA	mallard redhead Pacific white-fronted goose cackling Canada goose pintail canvasback	0	0	0
10-Upper Pacific Coast WA, OR, CA	Pacific brant mallard pintail	2,670	0	0
11-San Francisco Bay CA	canvasback	0	0	0
12-Additions to Existing Refuges All States	all waterfowl	4,502	0	0
		471,705	24,800	$16,176

Waterfowl Production Areas comprise the acquisition in fee or easement of prairie potholes scattered throughout the pothole region of the following States:

Idaho	- 1 county	Montana	- 22 counties
Iowa	- 1 county	Nebraska	- 7 counties
Michigan	- 2 counties	North Dakota	- 39 counties
Minnesota	- 24 counties	South Dakota	- 44 counties

The proposed refuge acquisitions under the Migratory Bird Conservation Account are tentative and are subject to the approval of the Migratory Bird Conservation Commission for individual tracts.

Actual acquisition accomplishments will vary depending upon total duck stamp receipts, willing sellers and availability of other high quality waterfowl habitat scheduled for acquisition.

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Migratory Bird Conservation Account	1987 Base		1987 Estimate		Inc(+)/Dec(-)	
	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount
Object Class						
11. Personnel Compensation						
11.1 Permanent Positions	128	3,772	128	3,772	...	...
11.3 Positions Other Than Permanent	29	419	5	72	-24	-347
11.5 Other Personnel Compensation	...	79	...	79	...	...
Total Personnel Compensation	157	4,270	133	3,923	-24	-347
Other Objects						
12.1 Personnel Benefits	...	676	...	621	...	-55
21.0 Travel and Transportation of Persons	...	285	...	150	...	-135
22.0 Transportation of Things	...	76	...	76	...	...
23.2 Communications, Utilities, and Other Rent	...	100	...	100	...	...
24.0 Printing and Reproduction	...	50	...	52	...	22
25.0 Other Services	...	2,210	...	2,298	...	88
26.0 Supplies and Materials	...	300	...	312	...	12
31.0 Equipment	...	275	...	286	...	11
32.2 Lands and Structures	...	6,158	...	8,682	...	2,524
Total Requirement	157	14,400	133	16,500	-24	2,100

Type size: 8 point 32 picas Case 180 Red underscore Case 200

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DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MIGRATORY BIRD CONSERVATION ACCOUNT

Program and financing (in thousands of dollars)

Identification code 14-5137-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities			
00 01 Printing and sale of hunting stamps	389	400	400
00 02 Acquisition of refuges and other areas	35540	28938	16050
10 00 Total obligations	35929	29338	16450
Financing			
17 00 Recovery of prior year obligations	-74		
21 40 Unobligated balance available, start of year	-200	-146	-118
24 40 Unobligated balance available, end of year	146	118	168
39 00 Budget authority	35801	29310	16500
Budget Authority			
40 00 Appropriation	21266	15000	
40 00 Reduction pursuant to P.L. 99-190		-90	
43 00 Appropriation (adjusted)	21266	14910	
60 00 Appropriation (indefinite, special fund)	14535	14400	16500

(Memo cost: 31.5) (Memo cost: 8) (Memo cost: 8) (Memo cost

Type size:
8 point 22 picas
Case 180
Red underscore
Case 220

STANDARD FORM 300
July 1964, Bureau of the Budget
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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MIGRATORY BIRD CONSERVATION ACCOUNT

Program and financing (in thousands of dollars)

Identification code 14-5137-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays			
71.00 Obligations incurred, net	35929	29338	16453
72.40 Obligated balance, start of year	3191	6962	1046
74.40 Obligated balance, end of year	-6962	-1046	-525
78.00 Adjustments in unexpired accounts	-74		
90.00 Outlays	32086	35254	16974

FWS-249

GPO 1971 O - 442-317

(Mono cast: 21.5) (Mono cast: 8) (Mono cast: 8) (Mono cast: 4.8)

Type size:
8 point 22 picas
Case 180
Rod underscore
Case 210

STANDARD FORM 300
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300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MIGRATORY BIRD CONSERVATION ACCOUNT

Object classification (in thousands of dollars)

Identification code 14-5137-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation			
11.1 Full-time permanent	3030	3772	3772
11.3 Other than full-time permanent	135	419	72
11.5 Other personnel compensation	49	79	79
11.9 Total personnel compensation	3214	4270	3923
12.1 personnel benefits civilian	572	676	621
21.0 Travel and transportation of persons	234	285	157
22.0 Transportation of things	76	76	76
23.2 Communications, utilities, and other rent	56	100	100
24.0 Printing and reproduction	31	50	52
25.0 Other services	1411	2210	[illegible]
26.0 Supplies and materials	259	300	[illegible]
31.0 Equipment	180	275	[illegible]
32.0 Lands and structures	29896	21096	8635
99.9 Total obligations	35929	29338	[illegible]

FWS-250

(Mono mat: 21.8) (Mono mat: 8) (Mono mat: 8) (Mono ma

Type size:
8 point 20 picas
Case 180
Red underscore
Case 280

STANDARD FORM 300
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[illegible]-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MIGRATORY BIRD CONSERVATION ACCOUNT
PERSONNEL SUMMARY

Identification code 14-5137-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	103	128	128
Total compensable workyears			
Full-time equivalent employment	132	157	133
Full-time equivalent of overtime and holiday hours	3	2	3
Average ES salary			
Average GS grade	9.58	9.54	9.55
Average GS salary	29374	29374	29374
Average salary of ungraded positions	22550	22550	22550

FWS-251

(Memo cut: 21.5) (Memo cut: 8) (Memo cut: 8) (Memo cut: 4.8)

Type size: 8 point 22 picas Case 100 Red underscore Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MIGRATORY BIRD CONSERVATION ACCOUNT (Pursuant to P L 99-17

Program and financing (in thousands of dollars)

Identification code 14-5137-6-2-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Printing and sale of hunting stamps			
00.02 Acquisition of refuges and other areas			
10.00 Total obligations		-1261	
Financing:			
17.00 Recovery of prior year obligations			
21.40 Unobligated balance available, start of year			-674
24.40 Unobligated balance available, end of year		674	674
39.00 Budget authority		-587	
Budget Authority:			
40.00 Appropriation			
40.00 Reduction pursuant to P L 99-177		-587	
43.00 Appropriation (adjusted)		-587	
60.00 Appropriation (indefinite, special fund)			
(Memo cast: 31.5)	(Memo cast: 8)	(Memo cast: 8)	(Memo cast: 4.8)

Type size:
8 point 22 picas
Case 180
Red underscore
Case 230

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MIGRATORY BIRD CONSERVATION ACCOUNT (Pursuant to P L 99-177)

Program and financing (in thousands of dollars)

Identification code 14-5137-6-2-303	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays:			
71.00 Obligations incurred, net		-1261	
72.40 Obligated balance, start of year			-45
74.40 Obligated balance, end of year		45	
78.00 Adjustments in unexpired accounts			
90.00 Outlays		-1216	-45

(Memo mat. 21.5)	(Memo mat. 8)	(Memo mat. 8)	(Memo mat. 4.5)

STANDARD FORM 300

[illegible]

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MIGRATORY BIRD CONSERVATION ACCOUNT (Pursuant to P.L. [illegible])

Object classification (in thousands of dollars)

Identification code 14-5137-0-2-303	19[illegible] [illegible]	19[illegible] [illegible]	19[illegible] [illegible]
93.0 Undistributed		-([illegible])	

[illegible]

Appropriation Summary Statement

Appropriation: National Wildlife Refuge Fund

Under 16 U.S.C. 715s, as amended by P.L. 95-469 of October 17, 1978, the Service makes payments to counties in which Service lands are located based on their fair market value. Funding for these payments is derived from revenues through the sale of products from Service lands, less expenses for producing revenue and activities related to revenue sharing If net revenues are insufficient to make full payments according to the formula contained in the Act, direct appropriations are authorized to make up the differential. Payments to counties will be $10,235,000 in FY 1987 with $5,645,000 derived from direct appropriation and $4,590,000 from net refuge receipts collected in FY 1986.

National Wildlife Refuge Fund

For expenses necessary to implement the Act of October 17, 1978 (16 U.S.C. 715s), $5,645,000.

(Department of the Interior and Related Agencies Appropriations Act, 1986 as included in Public Law 99-190)

Appropriation Language Citations

Fish and Wildlife Service

Appropriation: National Wildlife Refuge Fund

16 U.S.C. 715s, as amended; Refuge Revenue Sharing Act as amended, (Participation of Local Governments in Revenue from areas administered by the United States Fish and Wildlife Service

Basic authorizing legislation

The Refuge Revenue Sharing Act (16 U.S.C. 715s) authorizes revenues through the sale of products from Service lands, less expenses for producing revenue and activities related to revenue sharing. The Fish and Wildlife Service makes payments to counties in which Service lands are located. If the net revenues are insufficient to make full payments according to the formula contained in the Act, direct appropriations are authorized to make up the difference.

Justification of Program and Performance

Activity: National Wildlife Refuge Fund

(Dollar amount in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Refuge Revenue Sharing					
Budget Authority					
Appropriation Request	5,611	5,370	5,611	5,645	+ 34
Actual Year Receipt Collections	6,990	6,689	6,990	6,990	-0-
Receipts not available for Obligation		301			
Total	12,601	12,360	12,601	12,635	+ 34
Payments to Counties					
Receipts Available for Obligation (Unobligated balance, start-of-year)	4,377	4,188	4,377	4,590	+213
Appropriations	5,611	5,370	5,611	5,645	+ 34
Total	9,988	9,558	9,988	10,235	+247
Receipts from Sales					
Actual Year Receipts	6,990	6,689	6,990	6,990	+-0-
Expenses for Sales	2,400	2,296	2,400	2,400	+-0-
Receipts not Available for Obligation (Unobligated balance, end-of-year)	4,590	4,393	4,590	4,590	+-0-
ANILCA Oil and Gas Permits	50	48	50	50	-0-
Receipts not available for Obligation		2			
Total	50	50	50	50	-0-
Annual Fund Level					
Current Appropriations	5,611	5,370	5,611	5,645	+34
Permanent Receipts	6,990	6,689	6,990	6,990	-0-
ANILCA Permits	50	48	50	50	-0-
Receipts not Available for Obligation	-0-	303	-0-	-0-	-0-
Total ($)	12,651	12,410	12,651	12,685	+34
(FTE)	(26)	(26)	(26)	(26)	(0)

Gramm-Rudman-Hollings Impact

1986 Payments to Counties Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
12,651	241	12,410

As a result of P.L. 99-177, obligational authority for FY 1987 will be reduced by $544,000 and less funds will be available for payment to counties. Of the $544,000 reduction, $241,000 will be permanently cancelled and $303,000 will carryover to FY 1987 and future years.

Payments to Counties

Authorization: 16 U.S.C. 715s as amended; Refuge Revenue Sharing Act, of 1935 as amended, (Participation of Local Governments in Revenue from Areas Administered by the United States Fish and Wildlife Service).

The law classifies Service lands as reserved lands (reserved from the public domain) or fee lands (acquired). Payments to counties on Service-reserved lands are 25 percent of the net receipts from such lands in the county. In addition, the law authorizes payments in lieu of taxes to be made to counties for lands held by certain other Federal land management agencies. Payments to counties on Service fee lands are based on the largest of the following: (1) 25 percent of net receipts, (2) 3/4 of 1 percent of the fair market value, or (3) 75 cents per acre.

Objectives: To share with the counties the economic return from Service lands to alleviate the tax loss because of the exempt status of the landholdings.

Base Program: Under 16 U.S.C. 715s, as amended by P.L. 95-469 of October 17, 1978, the Fish and Wildlife Service makes payments to counties in which Service lands are located. Formerly, these payments related only to the National Wildlife Refuge System lands. The 1978 amendment extended the coverage to all holdings under sole or primary administration of the Fish and Wildlife Service. Funding for these payments is derived from revenues through the sale of products from Service lands less expenses for producing revenue and activities related to revenue sharing. If the net revenues are insufficient to make full payments according to the formula contained in the Act, direct appropriations are authorized to make up the difference.

The following table shows the commodities that generate receipts. The FY 1986 estimate of receipts used to make payments to counties is $6,690,000. The Nation's economy influences the level of receipts in the NWRF; for example, since almost 40 percent of receipts are based on the oil and gas commodity, a year in which production decreases would decrease the total NWRF. It is difficult to predict the fluctuations of the economy and, therefore, difficult to accurately forecast the level of receipts accruing into the NWRF.

NATIONAL WILDLIFE REFUGE FUND ESTIMATE OF FY 1986 RECEIPTS

Grazing	$1,380,000
Hay	200,000
Forest Products	650,000
Mineral Resources - Oil and Gas	2,630,000
Mineral Resources - Sand and Gravel	5,000
Surplus Animal Disposal	500,000
Furbearers	200,000
Salmonid Carcasses and Eggs	45,000
Public Use Revenues (concession operations, etc.)	100,000
Other (bee hives, raw water, other special use)	1,280,000
TOTAL	$6,690,000

The net receipts at the end of any fiscal year are carried over and payments to the counties are made for that year early in the succeeding year with a combination of the net receipts and appropriated funds.

The House Committee is concerned with the imbalance between funds available from receipts and payments in lieu of taxes to counties. The increase requested of $34,000 will aid in lowering this imbalance.

In FY 1987, payments to counties will total $10,235,000. Net receipts available for obligation are currently estimated at $4,590,000. The Service is requesting $5,645,000 in appropriations for payments to counties.

Changes for FY 1987		FY 1986	FY 1987	Change
Receipts Available for Obligation	($)	4,377	4,590	+213
Appropriation Request	($)	5,611	5,645	+ 34
Total	($)	9,988	10,235	+247

Expenses for Sales

Authorization: 16 U.S.C. 715s, Refuge Revenue Sharing Act, as amended, (Participation of Local Governments in Revenue from Areas Administered by the United States Fish and Wildlife Service).

Objectives: To administer revenue-producing activities on various field stations designed to yield the optimum level of natural resources for economic return in the course of improving fish and wildlife habitat.

Base Program: The Revenue Sharing Act, of 1935 as amended, provides for payment of expenses incurred in connection with revenue-producing activities from 1) the sale of wildlife refuge products, 2) other privileges and, 3) leases for public accommodations or facilities incidental to, and not in conflict with, refuge purposes.

Expenses incurred in connection with revenue-producing activities include 1) salaries of foresters who cruise and mark timber for sale, 2) salaries and supplies associated with maintenance of fences in support of grazing, 3) costs associated with sale of surplus animals and, 4) expenses involved in selling salmonid eggs and carcasses. Costs are also associated with collecting the refuge share of furs and crops, conducting land appraisals, administering the industrial complex at Crab Orchard National Wildlife Refuge, Illinois, and cooperative management (with the South Carolina Commission of Forestry) of forested habitat on Carolina Sandhills National Wildlife Refuge. The following table shows that the amount of effort that serves as the basis for the Expenses for Sales program:

	Actual	Estimated	
	FY 1985	FY 1986	FY 1987
Land Appraisals (No.)	108	90	90
Timber Sales Administration (Acres)	45,000	45,000	45,000
Timber Stand Improvement (Staff-hours)	17,000	17,000	17,000
Haying and Grazing Administration (Staff-hours)	2,700	2,700	2,700

Land appraisal decreases represent a minor, expected decrease that should result due to yearly changes in work commitments.

ANILCA Oil and Gas Permits

Authorization: Section 1002(d) and Section 1008, 16 U.S.C. 3142 Alaska National Interest Lands Conservation Act (ANILCA).

Section 401 (a), 16 U.S.C. 715s, Wildlife Refuge Revenue Sharing Act, as amended.

Objectives: To account for administrative costs associated with permitting oil and gas exploration within the Arctic National Wildlife Refuge (Section 1002) and Non-North Slope Federal lands (Section 1008).

Base Program: The Service has established a separate subactivity within the National Wildlife Refuge Fund (NWRF) to account for monies received from Section 1002 and 1008 permittees. Funds are available only to meet Service expenditures incurred in administering the permit program and monitoring the impact of exploration for oil and gas. Monies requested of the applicants for permits are related to the anticipated cost of Service work relative to the permits and period of exploration. Monies remain in the NWRF until expended or returned to permittees if there are excesses. These funds do not become available with other NWRF receipts for distribution to counties.

The level of receipts under the ANILCA subactivity is expected to be $50,000 in FY 1986 and FY 1987. The bulk of the work that will be done in FY 1987 will be under Section 1008 and will involve surface geological exploration, seismic exploration, and perhaps leasing.

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: National Wildlife Refuge Fund	1987 Base FTE-T	1987 Base Amount	1987 Estimate FTE-T	1987 Estimate Amount	Inc(+)/Dec(-) FTE-T	Inc(+)/Dec(-) Amount
Object Class						
11. Personnel Compensation						
11.1 Permanent Positions	26	766	26	766	...	...
11.5 Other Personnel Compensation	...	43	...	43	...	...
Total Personnel Compensation	26	809	26	809	...	...
Other Objects						
12.1 Personnel Benefits	...	127	...	127	...	...
21.0 Travel and Transportation of Persons	...	47	...	47	...	...
22.0 Transportation of Things	...	11	...	11	...	...
23.2 Communications, Utilities, and Other Rent	...	40	...	40	...	...
25.0 Other Services	...	1112	...	1,182	...	70
26.0 Supplies and Materials	...	203	...	203	...	...
31.0 Equipment	...	31	...	31	...	...
41.0 Grants, subsidies, and contributions	...	10,271	...	10,235	...	-36
Total Requirements	26	12,651	26	12,685	...	34

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE FUND

Program and financing (in thousands of dollars)

Identification code 14-5091-0-2-852	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Expenses for sales	2340	2400	2400
00.02 ANILCA Oil and Gas Permits	719	50	50
00.03 Payments to counties	10056	9988	10235
10.00 Total obligations	13115	12438	12685
Financing:			
21.40 Unobligated balance available, start of year	-4422	-4377	-4950
24.40 Unobligated balance available, end of year	4377	4590	4590
39.00 Budget authority	13070	12651	12685
Budget Authority:			
Current:			
40.00 Appropriation	5645	5645	5645
40.00 Reduction pursuant to P.L. 99-190		-34	
43.00 Appropriation (adjusted)	5645	5611	5645
Permanent:			
60.00 Appropriation (indefinite, special fund)	7425	7040	7040

FWS-264

GPO 1971 O - 443-317

(Memo cost: 21.0)	(Memo cost: 8)	(Memo cost: 8)	(Memo cost: 4.8)

Type size: 8 point 23 picas Case 180 Red underscore Case 220

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE FUND

Program and financing (in thousands of dollars)

Identification code 14-5091-0-2-852	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays:			
71.00 Obligations incurred, net	13115	12438	12685
72.40 Obligated balance, start of year	187	487	325
74.40 Obligated balance, end of year	-487	-325	-773
78.00 Adjustments in unexpired accounts			
90.00 Outlays	12815	12600	12237

FWS-265

(Mono cnt: 21.8) (Mono cnt: 8) (Mono cnt: 8) (Mono cnt: 4.8)

GPO 1971 O - 442-117

Type size:
8 point 22 picas
Case 180
Red underscore
Case 180

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE FUND

Object Classification (in thousands of dollars)

Identification code 14-5091-0-2-852	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation:			
11.1 Full-time permanent	1534	1366	1366
11.3 Other than full-time permanent	126		
11.5 Other personnel compensation	75	43	43
11.9 Total personnel compensation	1735	1409	1409
12.1 Personnel benefits: civilian	265	211	211
21.0 Travel and transportation of persons	76	25	47
22.0 Transportation of things	4	11	11
23.2 Communications, utilities, and other rent	27	38	43
24.0 Printing and reproduction	2		
25.0 Other services	637	502	468
26.0 Supplies and materials	204	195	200
31.0 Equipment	103	59	61
32.0 Lands and structures			
41.0 Grants, subsidies, and contributions	10062	9988	10235
99.9 Total obligations	13115	12438	12685

FWS-266

GPO : 1971 O - 442-317

(Memo cost: 21.8) (Memo cost: 8) (Memo cost: 8) (Memo cost: 4.8)

STANDARD FORM 300

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE FUND
PERSONNEL SUMMARY

Identification code 14-5091-0-2-852	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	52	28	28
Total compensable workyears:			
Full-time equivalent employment	66	28	28
Full-time equivalent of overtime and holiday hours	1	3	3
Average GS grade	9.50	9.56	9.55
Average GS salary	20374	20376	20376
Average salary of ungraded positions	22550	22550	22550

FWS-267

[illegible]

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE FUND (Pursuant to P.L. [illegible])

Program and financing (in thousands of dollars)

[illegible]	[illegible]	[illegible]	[illegible]
Program by activities:			
[illegible]			
[illegible]			
[illegible]			
10 00 Total obligations		[illegible]	
Financing:			
[illegible] Unobligated balance available, start of year			[illegible]
[illegible] Unobligated balance available, end of year		[illegible]	[illegible]
[illegible] Budget authority		[illegible]	
Budget authority:			
Current:			
[illegible] Appropriation			
[illegible]		[illegible]	
[illegible]		[illegible]	
Permanent:			
[illegible]			

[illegible]

[illegible] 300

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE FUND (Pursuant to P.L. 99-177)

Program and financing (in thousands of dollars)

Identification code 14-5091-0-2-806	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays			
71.00 Obligations incurred, net		-544	
72.40 Obligated balance, start of year			-211
74.40 Obligated balance, end of year		211	
78.00 Adjustments in unexpired accounts			
90.00 Outlays		-333	-211

Type size: 8 point 20 picas Case 100 Red underscore Case 200

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
NATIONAL WILDLIFE REFUGE FUND (Pursuant to P.L. 99-177)

Object Classification (in thousands of dollars)

Identification code 14-5091-0-2-852	19 85 actual	19 86 estimate	19 87 estimate
92 0 Undistributed		-544	

Appropriation Summary Statement

Appropriation: Sport Fish Restoration

Assistance is given to the States, Puerto Rico, Guam, the Virgin Islands, the Northern Mariana Islands, the American Samoa and the District of Columbia. States are reimbursed up to 75 percent of the cost of approved fish restoration and management projects, including research into fish culture, formulation of restocking plans, and acquisition and improvement of fish habitat. States are required to allocate at least 10 percent of the annual apportionment to facilities for recreational boating purposes, and may allocate at least 10 percent of their annual apportionment for an aquatic resource education program.

Appropriation Language Citations

Fish and Wildlife Service

Appropriation: Sport Fish Restoration Account

16 U.S.C. 777-777k; as amended by the Deficit Reduction Act of 1984 (PL 98-369) Federal Aid in Fish Restoration Act of 1950, commonly called the Dingell-Johnson or D-J Act (Payments to States).

Basic Authorizing Legislation

The purpose of this Act is to assist the States, Puerto Rico, Guam, the Virgin Islands, Northern Mariana Islands, American Samoa and the District of Columbia in carrying out projects to restore, enhance, and manage sport fishery resources.

Summary of Requirements
(Dollar amounts in thousands)

Appropriation: Sport Fish Restoration

	FTE-T	Amount
Appropriation, FY 1986	50	122,167
Adjustments to Base	-26	...
1987 Base Budget	24	122,127
Program Changes (Changes to Base Budget, Detailed Below)	...	+39,298
Total Requirements (1987 Estimate)	24	161,465

Comparison by Activity/Subactivity
(Dollar amounts in thousands)

Comparison by activity/ Subactivity	1986 Appropriation To Date		1987 Base		1987 Estimate		FY 1987 Change From the FY 1986 Appropriation		FY 1987 Change From FY 1987 Base	
	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount
Payments to States	...	114,837	...	120,167	...	159,465	...	44,628	...	39,298
Administration	50	7,330	24	2,000	24	2,000	-26	-5,330	...	...
Total Requirements	50	122,167	24	122,167	24	161,465	-26	+39,298	...	39,298

Justification of Program and Performance

Activity: Sport Fish Restoration
Subactivity: Fish Restoration

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1987 Estimate	Inc. (+) Dec. (-) From 1986
Payments to States	$	114,900	159,465	+ 44,565
	(FTE-T)	(0)	(0)	(0)
Administration	$	7,267	2,000	- 5,267
	(FTE-T)	(50)	(24)	(-26)
Common Program Services	$	(1,940)	(300)	(- 1,640)
	(FTE-T)	(0)	(0)	(0)
Reverted Funds	$	(90)	(90)	(0)
	(FTE-T)	(0)	(0)	(0)
Total Requirements	$	122,167	161,465	+ 39,298
	(FTE-T)	(50)	(24)	(-26)

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Fish Restoration	122,167	- 5,253	116,914

As a result of the P.L. 99-177, $5.253 million in spending authority, there may be the need to defer some grant-in-aid projects until fiscal year 1987. The change in program administrative costs ($312 thousand) will cause some positions to remain vacant until later in the fiscal year. Since these funds are derived from Trust Fund deposits, budget authority will be carried forward into future years.

PAYMENTS TO STATES

Authorization: 16 U.S.C. 777-777k; Federal Aid in Fish Restoration Act of 1950, as amended by the Deficit Reduction Act of 1984 (P.L. 98-369), commonly called the Dingell-Johnson or D-J Act. The purpose of this Act is to assist the States, Puerto Rico, Guam, the Virgin Islands, the Northern Mariana Islands, American Samoa, and the District of Columbia in carrying out projects to restore, enhance, and manage sport fishery resources.

Objective:

To support State projects, through financial assistance, that:

1. Restore, conserve, manage, and enhance sport fish resources.
2. Provide for public use and/or benefits from sport fish resources.

D-J AMENDMENTS

The Deficit Reduction Act of 1984 (Public Law 98-369), July 18, 1984, revised the program as follows:

An Aquatic Resources Trust Fund was created, effective October 1, 1984, composed of a Sport Fish Restoration Account and a Boating Safety Account. The Federal Aid in Fish Restoration program is funded by deposits in the Sport Fish Restoration Account.

Prior to the D-J amendments, the program was funded by receipts from the 10 percent excise tax on certain items of fishing equipment. In fiscal year 1985, the actual receipts made available from this source were $38,085,995. These receipts were made available for use in FY 1985 under permanent-indefinite appropriations authority. Public Law 98-369 provides that an additional amount will be deposited in the Sport Fish Restoration Account from a portion of the 5 cents per gallon tax on motorboat fuels. That portion of the motorboat fuels tax deposited in the Account is the amount remaining after $1 million has been deposited in the Land and Water Conservation Fund and up to $45 million has been deposited in the Boating Safety Account. In fiscal year 1985, additional deposits were made into the Sport Fish Restoration Account from the 10 percent excise tax on an expanded number of items of fishing equipment and the import duties on yachts and pleasure boats.

Base Program: All 50 States, Puerto Rico, Guam, American Samoa, the Northern Mariana Islands, the Virgin Islands, and the District of Columbia (referred to as the States) participate in this program through their fish and wildlife agencies. Each State selects projects for funding under the program based on its assessment of problems and needs associated with management of its sport fish resources.

The States have wide latitude in the selection of project activities to be funded under this grant program. Only a limited number of activities are ineligible for funding. These include public relations, law enforcement, and commercial activities or other activities where the production of revenue is the principal purpose. Restrictions also apply to stocking or release of fish for immediate harvest and any activities that fail to meet basic standards for substantiality in character and design as outlined in the Federal Aid Manual. These basic standards are that the project:

1. Identifies and describes a need within the purposes of the Act;
2. Identifies the objectives to be accomplished based on the need;
3. Utilizes accepted fish conservation and management principles and appropriate procedures to accomplish the objectives; and
4. Will yield benefits that are pertinent to the need at a level commensurate with project costs.

After making deductions for administrative expenses as provided in the Act, the remainder is apportioned to each State in accordance with a formula contained in the Act which distributes 40 percent of the funds based on the area of each State and 60 percent on the number of paid fishing license holders in each State. Puerto Rico receives 1 percent of total funds apportioned and Guam, the Virgin Islands, the Northern Mariana Islands, American Samoa, and the District of Columbia, each receive one-third of 1 percent.

To use the funds apportioned, the States have the option of submitting individual project proposals or submitting a resource conservation plan. The conservation plan option is discussed below.

As individual projects are submitted by the States and approved by the Fish and Wildlife Service, the Federal share of estimated costs is obligated to that project. Under a conservation plan, the Federal share is obligated in a single block to cover all eligible work identified by the State for Federal funding. The States are reimbursed for up to 75 percent of costs incurred under approved projects or plans. Puerto Rico, the Virgin Islands, Guam, the Northern Mariana Islands, and American Samoa are not required to provide a matching share.

Over 300 projects are funded each year. Typical project activities include research on fishery problems, surveys and inventories of fish species, creation and improvement of waters suitable for fish, and providing access and facilities for the public. Since the beginning of the program through fiscal year 1984, more than 192,000 acres were acquired under the program, and 361 fishing lakes comprising approximately 57,000 acres were created or restored.

The Service has simplified the grant funding process by minimizing the paperwork burden and by decreasing Federal overview for those States which have opted to develop long-range resource conservation plans. Under this option, the State develops a conservation plan which addresses broad State program objectives, problems, and strategies. At present, comprehensive conservation plans have been approved for five States (Colorado, Kansas, Maryland, Tennessee, and Wyoming). Twenty-three other States (Alaska, Arizona, California, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Maine, Michigan, Minnesota, Missouri, Montana, Nevada, New Jersey, New Mexico, Oregon, Texas, Washington, West Virginia, Wisconsin, and Puerto Rico) have undertaken initiatives in developing conservation plans. The Service has provided specialized assistance to States for this purpose, upon request, and will continue the emphasis on assisting States in the development of conservation plans. Following approval of a State's plan, the State submits a brief application including a list of work, related to the plan, for funding under the Federal Aid programs.

The management of sport fishery resources in the United States, which includes providing recreational fishing opportunities, is primarily a State responsibility. According to the 1980 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, 42.1 million persons over age 16 spent 858 million days fishing in 1980. Anglers spent $17.3 billion in 1980 for equipment, food and lodging, transportation, licenses, etc., in pursuit of sport fishing. The Federal financial assistance provided through the D-J Program assists the States in meeting this recreational demand.

(Dollars in Thousands)

Change from FY 1986	FY 1986	FY 1987 Estimate	Inc. (+) Dec. (-) From 1986
$	114,900	159,465	+44,565
(FTE-T)	(0)	(0)	(0)

The increase in Payments to States for fiscal year 1987 results from an anticipated increase in deposits in the Sport Fish Restoration Account of the Aquatic Resources Trust Fund and a decrease in administrative deductions. Exhibit 1 shows the estimated distribution of funds to the States for fiscal year 1986.

ADMINISTRATION

Authorization: 16 U.S.C. 777-777k; Federal Aid in Fish Restoration Act. Sec. 777c, as amended by P. L. 98-369, provides that, beginning in fiscal year 1986, up to 6 percent of the excise tax receipts may be deducted for expenses to administer and execute the Act. Prior to the amendment, 8 percent was authorized to be deducted from excise tax receipts.

Objectives: Objectives for the administrative portion of the D-J program are:

1. To administer and execute the program as provided by the authorizing Act, and the regulations and policies established by the Service to assure that the program continues to accomplish its intended purpose.

2. To provide services to the States in the design and execution of their fisheries projects, and conduct studies that will assist them in meeting their needs for fisheries management.

Base Program: The Service is authorized to deduct up to 6 percent from excise tax receipts prior to making apportionment of the remainder to the States. These funds may be used for general program administration and special projects which provide direct benefit to the States.

Program administrative costs represent salary and related support costs for personnel at the Washington and Regional Offices.

The D-J Act, and the regulations and policies issued under it, establishes conditions for State participation in the benefits of the Act. A principal condition is that projects carried out by the States must be "substantial in character and design." This requires working with the States at a professional level in project planning and design, and in the review of projects and comprehensive plans submitted for approval. As projects progress, they are monitored through on-site inspections and/or review of reports to assure work is being conducted as planned and approved. The Service is responsible for ensuring compliance with other Federal laws and regulations such as the National Environmental Policy Act, the Endangered Species Act, and OMB Circulars A-87 and A-102, applicable to grant programs. These activities are conducted at the Regional Offices.

Because of similarities between the D-J program and the related Federal Aid in Wildlife Restoration Program, they are administered jointly under similar regulations and policies, and within the same organizational structure. This results in savings due to shared supervision, staff, and related support services.

The special projects funded by deductions from excise tax receipts have purposes to serve State needs. These projects are carried out at the national level since it is more efficient and cost effective than the individual States undertaking these projects. Those special projects being undertaken in fiscal years 1986 which provide direct benefits to States are:

National Survey of Fishing, Hunting and Wildlife-Associated Recreation - In fiscal year 1986, $5,800,000 ($3,300,000 for P-R and $2,500,000 for D-J) are estimated for costs for the 1985 Survey. The Survey will be conducted by the Bureau of the Census under a cost reimbursable agreement with the Fish and Wildlife Service. In fiscal year 1986, the Bureau of the Census will conduct the interviews of sample households and collect the survey data. The Survey, which is national in scope, summarizes use patterns of the American people in their pursuit of fish and wildlife-related outdoor recreation and provides a comparable data base for each State. This Survey has been conducted every 5 years since 1955. The Survey data are used by both State and Federal fish and wildlife managers in establishing programs and priorities benefitting the resource and ultimately the recreationist.

Library Reference Service - The Library Reference Service is a continuing project which provides for the cataloging and indexing of research reports produced as a result of Federal Aid research. State researchers are the principal users of the Service. It provides bibliographic searches and copies of reports upon request. By use of this Reference Service, State researchers (and other users) are able to determine work already done in fish and wildlife research to minimize duplication or to build on prior findings. During 1984, nearly 3,000 requests for services were received, and nearly 5,000 reports were provided to requestors. In fiscal year 1986, an estimated $300,000 ($150,000 for P-R and $150,000 for D-J) will be used for this service.

Reservoir Data Storage and Retrieval - In fiscal year 1984, $47,000 was set aside for the costs of assembling and updating current reservoir fishery data. In fiscal year 1985, $122,000 was used for this project, with completion in fiscal year 1986, at an additional cost of $40,000. The National Reservoir Research Program was discontinued in fiscal year 1983. The data collected and disseminated by this program has been extremely useful to the States in the reservoir fisheries management program but is now unavailable. This project will assemble the remaining data from this research program and make it available to the States.

Aquatic Education Training Material - In fiscal year 1986, a project was initiated to develop materials which can be used by the States in carrying out their aquatic resource education programs. The 1984 amendments to the D-J Act authorized the States to use up to 10 percent of their annual apportionment for aquatic resource education programs. Since such programs are new to most States, and materials to conduct aquatic education programs are not presently available, there is a need for the development of training materials. The work will be conducted under a cooperative agreement and will require approximately two years and $140,000 for completion. The fiscal year 1986 cost is estimated at $77,500.

(Dollars in Thousands)

Change from FY 1986	FY 1986	FY 1987 Estimate	Inc. (+) Dec. (-) From 1986
Administration			
$	7,267	2,000	-5,267
(FTE-T)	(50)	(24)	(-26)

(Dollar Amounts in Thousands)

	FY 1986	FY 1987	(+)or(-)
Program administrative costs	2,559	1,700	- 859
Common program services	1,940	300	-1,640
National Survey of Hunting and Fishing	2,500	0	-2,500
Library Reference Service	150	0	- 150
Reservoir Data Storage and Retrieval	40	0	- 40
Aquatic Education Training	78	0	- 78
Total	7,267	2,00C	-5,267

Overall costs for administration will decrease in fiscal year 1987, and the amount of the decrease will be added to the funds made available to the States. Program administration and Common Program Services will be reduced within the limits of funds and staffing available. The Reservoir Data Project will be completed in fiscal year 1986, and will not require funding in fiscal year 1987. Other special projects will be discontinued in fiscal year 1987 pending the availability of alternative funding sources. These discontinued projects are the National Survey of Hunting and Fishing, the Library Reference Services, and development of aquatic resources training material.

REVERTED FUNDS

Authorization: 16 U.S.C. 777-777k; Federal Aid in Fish Restoration Act. Section 777b provides that funds not used by the States shall revert to the Fish and Wildlife Service.

Objective: To carry out the research program of the Fish and Wildlife Service relating to fish of material value for sport or recreation.

Base Program: The D-J Act provides that funds apportioned to the States are available for obligation and expenditure during the year of apportionment and the succeeding fiscal year. After this period of availability the funds revert to the Service for fishery research purposes. Since the beginning of the D-J program, $3,977,400 have reverted to the Service. The following table shows actual reversions by year for the past 10 years:

Fiscal Year	Dingell-Johnson
1976	90,058
1977	73,455
1978	158,720
1979	358,682
1980	224,076
1981	115,278
1982	160,609
1983	76,052
1984	96,583
1985	90,012
Total	$ 1,443,525

The amount of reversions is not predictable, and varies, since they are based on the States' ability to obligate and expend funds in any one year.

Exhibit 2 shows the uses of reverted funds for fiscal year 1985. Since these funds do not have a time limitation for obligation, small amounts may be carried forward to a subsequent fiscal year where higher priority activities may be supported. Thus, the total in Exhibit 2 does not equal the total amount of reverted funds listed for fiscal year 1984.

EXHIBIT 1

Estimated
"Dingell-Johnson"
Final Apportionment for Federal Aid in Fish Restoration
Fiscal Year 1986

	BASE FUNDS	EXPANDED FUNDS	TOTAL
ALABAMA	646,150	1,323,151	1,969,301
ALASKA	1,885,000	3,860,000	5,745,000
ARIZONA	801,515	1,641,299	2,442,814
ARKANSAS	640,970	1,312,543	1,953,513
CALIFORNIA	1,885,000	3,860,000	5,745,000
COLORADO	922,447	1,888,937	2,811,384
CONNECTICUT	377,000	772,000	1,149,000
DELAWARE	377,000	772,000	1,149,000
FLORIDA	828,578	1,696,717	2,525,295
GEORGIA	763,883	1,564,239	2,328,122
HAWAII	377,000	772,000	1,149,000
IDAHO	638,856	1,308,215	1,947,071
ILLINOIS	830,719	1,701,101	2,531,820
INDIANA	653,681	1,338,572	1,992,253
IOWA	563,448	1,153,798	1,717,246
KANSAS	554,152	1,134,762	1,688,914
KENTUCKY	616,286	1,261,998	1,878,284
LOUISIANA	616,531	1,262,498	1,879,029
MAINE	377,000	772,000	1,149,000
MARYLAND	377,000	772,000	1,149,000
MASSACHUSETTS	377,000	772,000	1,149,000
MICHIGAN	1,395,448	2,857,523	4,252,971
MINNESOTA	1,422,810	2,913,554	4,336,364
MISSISSIPPI	541,113	1,108,061	1,649,174
MISSOURI	988,920	2,025,086	3,014,006
MONTANA	850,843	1,742,309	2,593,152
NEBRASKA	491,659	1,006,792	1,498,451
NEVADA	587,567	1,203,188	1,790,755
NEW HAMPSHIRE	377,000	772,000	1,149,000
NEW JERSEY	377,000	772,000	1,149,000
NEW MEXICO	681,920	1,396,399	2,078,319
NEW YORK	915,520	1,874,790	2,790,310
NORTH CAROLINA	525,176	1,075,428	1,600,604
NORTH DAKOTA	420,817	861,726	1,282,543
OHIO	934,184	1,912,991	2,847,175
OKLAHOMA	741,805	1,519,028	2,260,833
OREGON	874,997	1,791,771	2,666,768
PENNSYLVANIA	940,210	1,925,313	2,865,523
RHODE ISLAND	377,000	772,000	1,149,000
SOUTH CAROLINA	422,559	865,292	1,287,851
SOUTH DAKOTA	448,972	919,380	1,368,352
TENNESSEE	679,227	1,390,885	2,070,112
TEXAS	1,885,000	3,860,000	5,745,000
UTAH	633,746	1,297,751	1,931,497
VERMONT	377,000	772,000	1,149,000
VIRGINIA	554,635	1,135,753	1,690,388
WASHINGTON	872,868	1,787,411	2,660,279
WEST VIRGINIA	377,000	772,000	1,149,000
WISCONSIN	1,319,239	2,701,460	4,020,699
WYOMING	571,166	1,169,602	1,740,768
PUERTO RICO	377,000	772,000	1,149,000
GUAM	125,667	257,333	383,000
VIRGIN ISLANDS	125,667	257,333	383,000
AMERICAN SAMOA	125,667	257,333	383,000
MARIANA ISLANDS	125,667	257,333	383,000
DISTRICT OF COLUMBIA	125,667	257,333	383,000
TOTAL	$37,702,000	$77,200,000	$114,902,000

EXHIBIT [illegible]

[illegible] OF FEDERAL AID [illegible] [illegible]
FISCAL YEAR [illegible]

Second year support of Cooperative Education Agreement (CEA) of a Ph.D. candidate, University of [illegible], [illegible]. Study area: genetic and [illegible] studies to [illegible] to control [illegible] in [illegible] [illegible]. Seattle National Fishery Research Center, WA.	[illegible]
First year support of CEA for MS candidate, University of Idaho. Study area: predator/prey relationships in [illegible] areas of the Columbia River. Seattle National Fishery Research Center, WA.	[illegible]
First year support of CEA for MS candidate, University of Idaho. Study area: control of [illegible] in [illegible] [illegible]. Seattle National Fishery Research Center, WA.	[illegible]
First year support of CEA for doctoral MS candidate, Oregon State University. Study area: predator/prey relationships in [illegible] of the Columbia River. Seattle National Fishery Research Center, WA.	[illegible]
Map important lake trout spawning grounds in Lakes Huron and Michigan to establish refuge spawning areas. Great Lakes Fisheries Laboratory, Ann Arbor, MI.	[illegible]
Total	[illegible]

STANDARD FORM 300

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
SPORT FISH RESTORATION

Program and financing (in thousands of dollars)

Identification code 14-8151-0-7-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities			
00 01 Payments to States		102870	107070
00 02 Administration		7130	2930
10 00 Total obligations		110000	110000
Financing			
21 40 Unobligated balance available, start of year			-12187
24 40 Unobligated balance available, end of year		12187	83837
40 00 Budget authority (appropriation) (permanent), indefinite		122187	181677

FWS-301

Column 1-5	Column 6	Column 6	Column 6

STANDARD FORM 300

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
SPORT FISH RESTORATION

Program and financing (in thousands of dollars)

Identification code 14-8151-0-7-303	19__ actual 85	19__ estimate 86	19__ estimate 87
Relation of obligations to outlays:			
71.00 Obligations incurred, net		110000	110000
72.40 Obligated balance, start of year			20000
74.40 Obligated balance, end of year		-20000	-4469
90.00 Outlays		90000	125531

Type size:
8 point 22 picas
Case 100
Red underscore
Case 200

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
SPORT FISH RESTORATION

Object classification (in thousands of dollars)

Identification code 14-8151-0-7-303	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation			
11.1 Full-time permanent		1060	707
11.3 Other than full-time permanent		282	
11.5 Other personnel compensarion		28	28
11.9 Total personnel compensation		1290	735
12.1 Personnel benefits: Civilian		204	115
21.0 Travel and transportation of persons		134	40
22.0 Transportation of things		100	75
23.2 Communications, utilities and other rent		5	5
24.0 Printing and reproduction		10	10
25.0 Other services		5427	860
26.0 Supplies and materials		60	60
31.0 Equipment		100	100
41.0 Grants, subsidies, and contributions		102670	108000
99.9 Total obligations		110000	110000

(Mono mat: 21.5)	(Mono mat: 8)	(Mono mat: 8)	(Mono mat: 4.8)

Type size:
8 point 22 picas
Case 180
Red underscore
Case 280

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
500-191

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
SPORT FISH RESTORATION
PERSONNEL SUMMARY

Identification code 14-8151-0-7-303	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions		36	24
Total compensable workyears:			
Full-time equivalent employment		50	24
Full-time equivalent of overtime and holiday hours			
Average GS grade	9.58	9.54	9.55
Average GS salary	29374	29374	29374
Average salary of ungraded positions	22550	22550	22550

FWS-286

(Mono cast: 21.8)	(Mono cast: 8)	(Mono cast: 8)	(Mono cast: 4.9)

Type size:
8 point 22 picas
Case 180
Red underscore
Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
SPORT FISH RESTORATION (Pursuant to P L 99-177)

Program and financing (in thousands of dollars)

Identification code 14-8151-6-7-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00 01 Payments to States		-4378	
00 02 Administration		-875	
10 00 Total obligations		-5253	
Financing			
21 40 Unobligated balance available, start of year			-5253
24 40 Unobligated balance available, end of year		5253	5253
60 00 Budget authority (appropriation) (permanent, indefinite)			

(Mono cast: 21.5) (Mono cast: 8) (Mono cast: 8) (Mono cast: 4.9)

Type size:
8 point 22 picas
Case 180.
Red underscore
Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
SPORT FISH RESTORATION (Pursuant to P L 99-177)

Program and financing (in thousands of dollars)

Identification code 14-8151-6-7-303	19 actual 85	19 estimate 86	19 estimate
Relation of obligations to outlays			
71 00 Obligations incurred, net		-5253	
72 40 Obligated balance, start of year			-3418
74 40 Obligated balance, end of year		3418	
90 00 Outlays		-1835	-3418

(Mono cast: 21.5) (Mono cast: 5) (Mono cast: 5) (Mono cast: 4.9)

Type size
8 point 22 picas
Case 180.
Red underscore
Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
SPORT FISH RESTORATION (Pursuant to P L 99-177)

Object classification (in thousands of dollars)

Identification code 14-8151-6-7-303	19 actual 85	19 estimate 86	19 estimate –
92 0 Undistributed		-5253	
(Mono cast: 21.5)	(Mono cast: 5)	(Mono cast: 5)	(Mono cast: 4.9)

Appropriation Summary Statement

Appropriation: Permanents and Trusts

Assistance is given to the States, Puerto Rico, Guam, the Northern Mariana Islands, and the Virgin Islands by the appropriation of funds equal to the 11 percent excise tax on sporting arms and ammunition, the 10 percent excise tax on handguns, and the 11 percent on certain archery equipment. States are reimbursed up to 75 percent of the cost of approved wildlife restoration projects, including acquisition and development of land and water areas, for wildlife management research and approved hunter education programs.

Receipts collected from the sale of products from national wildlife refuges established as overlay projects on Corps of Engineers land are used to cover expenses for producing these products and for managing wildlife habitat.

Contributed funds consists mainly of monies appropriated to the State Department to support the sea lamprey research and control program administered by the Great Lakes Fishery Commission. Also, small amounts of donations are accepted from private organizations and individual citizens in furtherance of Service programs.

Rents and other charges collected for occupancy of government-owned quarters are used for maintenance of housing units operated by the Fish and Wildlife Service.

Approriation Language Citations

Fish and Wildlife Service

Appropriation language

Activities funded from Miscellaneous Permanent Appropriations do not require appropriation language in the budget since there is permanent authority to use the receipts.

Appropriation language citations and explanations

16 U.S.C. 669-669i
16 U.S.C. 460d
16 U.S.C. 838; 662; 90 stat. 2921

16 U.S.C. 669-669i; the Federal Aid in Wildlife Restoration Act of 1937, as amended, commonly called the Pittman-Robertson or P-R Act. The purpose of this act is to assist the States, Puerto Rico, Guam, Northern Mariana Islands, and Virgin Islands in carrying out projects to restore, enchance and manage wildlife resources, and for the conduct of State hunter education programs.

16 U.S.C. 460d provides for Public Parks and Recreational Facilities in Water Resource Development Projects. This covers receipts collected for the sale of products on lands in which the U.S. Army Corps of Engineers has primary jurisdiction and are used to cover expenses of producing these products and for managing the wildlife habitat in accordance with an agreement.

16 U.S.C. 662; Fish and Wildlife Coordination Act - requires that the costs of constructing, operating, and maintaining measures to prevent or compensate for damages to fish and wildlife caused by a Federal project be considered integral costs of the project.

Public Law 98-548 amends the Federal Aid in Wildlife Restoration Act to make American Samoa eligible for wildlife restoration and hunter safety programs.

Basic authorizing legislation

Activities funded under this heading include a grant program to the States for Federal Aid in Wildlife restoration, and several national wildlife refuges established as overlay projects on U.S. Army Corps of Engineers land. The grant program is funded by excise taxes and the overlay refuges by receipts derived from timber and grains harvesting activities.

Justification of Program and Performance

Activity: Federal Aid
Subactivity: Wildlife Restoration

(Dollar Amounts in Thousands)

Program Elements		1986 Enacted To Date	1987 Estimate	Inc. (+) Dec. (-) From 1986
Payments to States	$	112,300	93,000	-19,300
	(FTE-T)	(0)	(0)	(0)
Administration	$	8,529	2,000	- 6,529
	(FTE-T)	(50)	(24)	(-26)
Common Program Services	$	(2,050)	(300)	(-1,750)
	(FTE-T)	(0)	(0)	(0)
Reverted Funds	$	(427)	(427)	(0)
	(FTE-T)	(0)	(0)	(0)
Total Requirements	$	120,829	95,000	-25,829
	(FTE-T)	(50)	(24)	(-26)

Gramm-Rudman-Hollings Impact

	1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Wildlife Restoration	120,829	- 5,195	115,634

As a result of the P.L. 99-177, $5.195 million in spending authority, there may be the need to defer some grant-in-aid projects until fiscal year 1987. The change in program administrative costs ($367 thousand) will cause some positions to remain vacant until later in the fiscal year. Also, some workshops for grantees may need to be cancelled, and all but the highest priority travel will be curtailed. Since these funds are from a Special Fund Appropriation, budget authority will be carried forward into future years.

PAYMENTS TO STATES

Authorization: 16 U.S.C. 669-669i; Federal Aid in Wildlife Restoration Act of 1937, as amended, commonly called the Pittman-Robertson or P-R Act. The purpose of this Act is to assist the States, Puerto Rico, Guam, the Northern Mariana Islands, American Samoa, and the Virgin Islands in carrying out projects to restore, enhance and manage wildlife resources, and for the conduct of State hunter education programs.

Objectives:

To support State projects, through financial assistance, that:

1. Restore, conserve, manage, and enhance wild birds and mammals.
2. Provide for public use and/or benefits from wildlife resources.
3. Educate hunters in the skills, knowledge, and attitudes necessary to be a safe and responsible hunter.

Base Program: All 50 States, Puerto Rico, Guam, the Northern Mariana Islands, American Samoa, and the Virgin Islands (referred to as the States) participate in this program through their fish and wildlife agencies. Each State selects projects for funding under the program based on its assessments of problems and needs associated with management of its wildlife resources.

The States have wide latitude in the selection of projects to be funded under this grant program in that only a limited number of activities are ineligible for funding. These include public relations, law enforcement, commercial activities, or activities where the production of revenue is the principal purpose. Restrictions also apply to stocking or releasing of wildlife for immediate harvest without objectives for restoration or establishment of self-sustaining populations, and any activities that fail to meet basic standards for substantiality in character and design as outlined in the Federal Aid Manual. These basic standards are that the project:

1. Identifies and describes a need within the purposes of the Act;
2. Identifies the objectives to be accomplished based on the need;
3. Utilizes accepted wildlife conservation and management principles and appropriate procedures to accomplish the objectives; and
4. Will yield benefits that are pertinent to the need at a level commensurate with project costs.

The funds to support the State projects are derived from the 11 percent excise tax on firearms, ammunition and archery equipment, and the 10 percent tax on pistols and revolvers. These tax receipts are appropriated to the Service, through permanent-indefinite appropriation authority, for use in the fiscal year following collection. After making deductions for administrative expenses, as provided in the Act, the remainder is apportioned to the States in accordance with a formula contained in the Act which distributes 50 percent of the funds based on the area of each State and 50 percent on the number of paid hunting license holders in each State. Puerto Rico receives one-half of 1 percent and Guam, the Virgin Islands, American Samoa, and the Northern Mariana Islands each receive one-sixth of 1 percent of the total funds apportioned. An additional amount is apportioned to the States for hunter education based on population. The following shows amounts collected and apportioned to the States during the period 1976-1985:

(Dollar Amounts in Thousands)

Fiscal Year	Excise Tax Collections	Amount Apportioned
1976	63,047	58,600
1977*	89,687	84,400
1978	67,789	62,900
1979	86,019	82,200
1980	93,974	89,000
1981	90,645	83,394
1982	121,888	116,960
1983	111,454	107,060
1984	93,707	88,450
1985	85,872	79,100
	904,082	852,064

* Includes Transition Quarter - Covers 15-month period.

To use the funds apportioned, the States have the option of submitting individual project proposals or submitting a resource conservation plan. The conservation plan option is discussed below.

As individual projects are submitted and approved, the Federal share of estimated costs is obligated to that project. Under a conservation plan, the Federal share is obligated in a single block to cover all eligible work identified by the State for Federal funding. The States are reimbursed for up to 75 percent of costs incurred under approved projects or plans. Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands are not required to provide a matching share.

Over 400 projects are funded each year. Typical project activities include research on wildlife problems, surveys and inventories of wildlife species, acquisition and improvement of wildlife habitat, providing access and facilities for the public, and providing training in hunter safety and responsibilities. Since the beginning of the program through fiscal year 1984, over 4 million acres of land were acquired under the program and 4,385 wildlife management areas were acquired, developed or managed.

The Service has simplified the grant funding process by minimizing the paperwork burden and by decreasing Federal overview for those States which have opted to develop long-range resource conservation plans. Under this option, the State develops a conservation plan which addresses broad State program objectives, problems, and strategies. At present, comprehensive conservation plans have been approved for five States (Colorado, Kansas, Maryland, Tennessee, and Wyoming). Twenty-three other States (Alaska, Arizona, California, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Maine, Michigan, Minnesota, Missouri, Montana, Nevada, New Jersey, New Mexico, Oregon, Texas, Washington, West Virginia, Wisconsin, and Puerto Rico) have undertaken initiatives in developing conservation plans. The Service has provided specialized assistance to States for this purpose, upon request, and will continue the emphasis on assisting States in the development of conservation plans. Following approval of a State's plan, the State submits a brief application including a list of work, related to the plan, for funding under the Federal Aid programs.

The management of wildlife resources in the United States, which includes providing recreational opportunities related to wildlife resources, is primarily a State responsibility. According to the 1980 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, 17.4 million persons over age 16 spent more than 330 million days hunting in 1980. In addition, 93.2 million persons over age 16 spent more than 277 million days participating in some type of nonconsumptive wildlife-associated activity. Hunters spent approximately $8.5 billion in 1980 on their sport. Expenditures for nonconsumptive use of wildlife totaled $14.7 billion. Expenditures for both consumptive and nonconsumptive use of wildlife were for equipment, licenses, food and lodging, transportation, and related expenses. The Federal financial assistance provided through the P-R program assists the States in meeting these recreational demands.

(Dollars in Thousands)

Change from FY 1986	FY 1986	FY 1987 Estimate	Inc. (+) Dec. (-) From 1986
Payments to States			
$	113,300	93,800	-19,500
(FTE-T)	(0)	(0)	(0)

The decrease in Payments to States for fiscal year 1987 is a reflection of the anticipated decrease in excise tax receipts from the actual fiscal year 1986 receipts of $120.8 million to the projected receipts of $95 million for fiscal year 1987. The actual fiscal year 1986 receipts of $120.8 million, as reported by the Internal Revenue Service, were higher than anticipated due to the inclusion of some adjustments by I.R.S. and receipts from returns filed late by the industry. The estimated receipts for fiscal year 1987 of $95 million is a more accurate reflection of the historical trends for these tax receipts. Exhibit 1 shows the estimated distribution of funds to the States for fiscal year 1986.

ADMINISTRATION

Authorization: 16 U.S.C. 669-669i, Federal Aid in Wildlife Restoration Act. Sec. 669c provides that up to 8 percent of the excise tax receipts may be deducted for expenses in the administration and execution of this Act and the Migratory Bird Conservation Act (16 U.S.C. 715-715d).

Objectives: Objectives for the administrative portion of the P-R program are:

1. To administer and execute the program as provided by the authorizing Act, and the regulations and policies established by the Service, to assure that the program continues to accomplish its intended purpose.

2. To provide services to the States in the design and execution of their wildlife projects, and conduct studies which will assist them in meeting their needs for wildlife management.

Base Program: The Service is authorized to deduct up to 8 percent from excise tax receipts prior to making apportionment of the remainder to the States. These funds may be used for general program administration, special projects which

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Migratory Bird Program - The P-R Act also authorizes the deduction of funds from excise tax receipts for carrying out the Migratory Bird Conservation Act. The Service continues to support migratory bird work having direct benefits to the States. Support is provided for the costs of the Fish and Wildlife Service Migratory Bird Banding Laboratory. The laboratory processes banding data which is used by the Service and the States in managing migratory birds. In fiscal year 1986, $150,000 will be used for migratory bird work. This work will not be funded in fiscal year 1987 using P-R administrative funds.

(Dollars in Thousands)

Change from FY 1986	FY 1986	FY 1987 Estimate	Inc. (+) Dec. (-) From 1986
Administration $ (FTE-P)	6,529 (50)	2,000 (26)	- 4,529 (-24)

(Dollar Amounts in Thousands)

	FY 1986	FY 1987	(+) or (-)
Program administrative costs	2,549	1,700	- 849
Common Program Services	2,050	300	-1,750
National Survey of Hunting and Fishing	1,300	0	-1,300
Library Reference Service	150	0	- 150
DAPA Research	30	0	- 30
Satellite Tracking Development	300	0	- 300
Migratory Bird Program	150	0	- 150
Total	6,529	2,000	-4,529

Overall costs for administration will decrease in fiscal year 1987, and the amount of the decrease will be added to the funds made available to the States. Program administration and Common Program Services will be reduced within the limits of the funds and staffing available. The DAPA research project will be completed in fiscal year 1986, and will not require funding in fiscal year 1987. Other special projects will be discontinued in fiscal year 1987 pending the availability of alternative funding sources. These discontinued projects are the National Survey of Hunting and Fishing, the Library Reference Services, the Satellite Tracking Development project, and support for the Migratory Bird Banding Laboratory.

REVERTED FUNDS

Authorization: 16 U.S.C. 669-669i, Federal Aid in Wildlife Restoration Act. Section 669c provides that funds not used by the States shall revert to the Fish and Wildlife Service.

Objectives: To carry out the purposes of the Migratory Bird Conservation Act (16 U.S.C. 701-718h). These include:

1. Restoration and management of migratory birds.

2. Research into problems related to migratory birds.

3. Acquisition of areas for the benefit of waterfowl and other migratory birds.

4. Establishment of rules and regulations on the taking of migratory birds.

Base Program: The P-R Act provides that funds apportioned to the States are available for obligation and expenditure during the year of apportionment and the succeeding fiscal year. After this period of availability, the funds revert to the Service for carrying out the Migratory Bird Conservation Act. Since the beginning of the P-R program, $13,935,551 have reverted to the Service. The following table shows actual reversions by year for the past 10 years:

Fiscal Year	Pittman-Robertson
1976	98,949
1977	539,017
1978	1,724,675
1979	771,013
1980	787,651
1981	981,220
1982	968,424
1983	682,750
1984	51,046
1985	427,379
Total	$ 7,032,124

Reversions are not predictable, and vary, since they are based on the States' ability to obligate and expend funds in any one year.

Exhibit 2 shows the uses of reverted funds for fiscal year 1985. Since these funds do not have a time limitation for obligation, funds may be carried forward to a subsequent fiscal year where higher priority activities may be supported. Thus, the total on Exhibit 2 does not equal the total amount of reverted funds listed for fiscal year 1984.

EXHIBIT 1

Estimated
"Pittman-Robertson"
Final Apportionment for Federal Aid in Wildlife Restoration
Fiscal Year 1986

	WILDLIFE RESTORATION	HUNTER EDUCATION	TOTAL
ALABAMA	1,595,742	382,816	1,978,558
ALASKA	4,824,500	158,100	4,982,600
ARIZONA	2,281,439	267,462	2,548,901
ARKANSAS	1,658,030	224,914	1,882,945
CALIFORNIA	3,851,329	474,300	4,325,629
COLORADO	2,459,300	284,286	2,743,587
CONNECTICUT	482,450	305,813	788,263
DELAWARE	482,450	158,100	640,550
FLORIDA	1,612,384	474,300	2,086,684
GEORGIA	1,945,980	474,300	2,420,280
HAWAII	482,450	158,100	640,550
IDAHO	1,961,878	158,100	2,119,978
ILLINOIS	1,798,442	474,300	2,272,742
INDIANA	1,458,526	474,300	1,932,826
IOWA	1,611,825	286,703	1,898,528
KANSAS	1,953,964	232,560	2,186,524
KENTUCKY	1,485,018	360,317	1,845,335
LOUISIANA	1,836,307	413,707	2,250,013
MAINE	1,126,099	158,100	1,284,199
MARYLAND	644,420	414,935	1,059,355
MASSACHUSETTS	482,450	474,300	956,750
MICHIGAN	3,473,042	474,300	3,947,342
MINNESOTA	2,593,930	401,227	2,995,157
MISSISSIPPI	1,556,637	248,053	1,804,689
MISSOURI	2,428,874	474,300	2,903,174
MONTANA	2,935,646	158,100	3,093,746
NEBRASKA	1,666,030	158,100	1,824,130
NEVADA	1,839,766	158,100	1,997,866
NEW HAMPSHIRE	482,450	158,100	640,550
NEW JERSEY	502,588	474,300	976,888
NEW MEXICO	2,235,352	158,100	2,393,452
NEW YORK	3,033,739	474,300	3,508,039
NORTH CAROLINA	1,743,059	474,300	2,217,359
NORTH DAKOTA	1,342,582	158,100	1,500,682
OHIO	1,944,366	474,300	2,418,666
OKLAHOMA	2,130,985	297,713	2,428,698
OREGON	2,484,699	259,077	2,743,776
PENNSYLVANIA	4,291,235	474,300	4,765,535
RHODE ISLAND	482,450	158,100	640,550
SOUTH CAROLINA	1,040,007	306,957	1,346,964
SOUTH DAKOTA	1,664,976	158,100	1,823,076
TENNESSEE	2,203,571	451,770	2,655,341
TEXAS	4,824,500	474,300	5,298,800
UTAH	1,947,466	158,100	2,105,566
VERMONT	525,611	158,100	683,711
VIRGINIA	1,914,219	474,300	2,388,519
WASHINGTON	1,906,082	406,444	2,312,526
WEST VIRGINIA	1,298,468	158,100	1,456,568
WISCONSIN	2,867,032	463,046	3,330,078
WYOMING	1,969,937	158,100	2,128,037
PUERTO RICO	482,450	--	482,450
GUAM	160,817	--	160,817
VIRGIN ISLANDS	160,817	--	160,817
AMERICAN SAMOA	160,817	--	160,817
MARIANA ISLANDS	160,817	--	160,817
TOTAL	$96,490,000	$15,810,000	$112,300,000

EXHIBIT 2

USE OF FEDERAL AID (WILDLIFE) REVERTED FUNDS IN FY 1985

Collect and analyze data from Mallard Study - Wisconsin	7,000
Evaluate effects of hunting regulations on waterfowl/Indian lands	11,000
General Administrative Services	6,957
TOTAL	24,957

Justification of Program and Performance

Appropriation: Permanent Appropriation
Activity: Proceeds From Sales, Water Resources Development Projects

(Dollar amounts in thousands)

	1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Wildlife Refuges ($)	200	191	200	200	-0-
Total Requirements ($)	200	191	200	200	-0-

Gramm-Rudman-Hollings Impact

1986 Enacted To Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
200	-9	191

Obligational authority for FY 1987 will be reduced by $9,000 and will carry-over to FY 1987 and future years.

Authorization: 16 U.S.C. 460d, Public Parks and Recreational Facilities in Water Resource Development Projects. This covers receipts collected from the sale of products on lands in which the U.S. Army Corps of Engineers has primary jurisdiction and are used to cover expenses of producing these products and for managing the wildlife habitat in accordance with an agreement.

Objective: To serve wildlife management purposes by managing timber and harvesting crops; to collect and deposit proceeds from sales; and to utilize the funds in the Proceeds from Sales account in the development, conservation, maintenance, and management of the wildlife habitat on refuges.

Base Program: Several national wildlife refuges were established as overlay projects on U.S. Army Corps of Engineers land and are administered in accordance with cooperative agreements. The agreements provide that timber and grain may be harvested and sold with the receipts returned for development, conservation, maintenance, and utilization of such lands. A special fund receipt account was established for deposit of these receipts in accordance with Treasury regulations. The receipts are used to cover the expenses of forestry technicians administering timber harvest activities and for development and maintenance of wildlife habitat. These expenses can not exceed the amount of receipts deposited as proceeds from sales. Refuges currently engaged in timber and grain harvesting on these water resources development projects are:

Felsenthal NWR, Arkansas
Eufaula NWR, Alabama
Mark Twain NWR, Illinois
Flint Hills NWR, Kansas

Examples of some of the projects undertaken are: soil amendments (lime and fertilizer), road construction and repairs, ditch and fence construction and repairs, equipment and storage building construction and maintenance. Under the terms of the agreements with the Corps of Engineers, the receipts collected on refuges must be spent within five years. This provides for carryover balances from year to year, which allows the receipts to accumulate until sufficient funds are available to support some of the larger development projects on these refuges.

The following workload factors are indicated in the Proceeds from Sales program.

	1985	1986	1987
Timber Sales Administration (Acres)	200	200	200
Cropland Operations (Acres)	14,200	14,200	14,200

FY 1987 Program: The estimate of FY 1987 receipts is $200,000. The level of receipts depends on the current market value of the saleable commodity (timber or crops) and the amount of the commodity that the Service may make available for wildlife habitat management purposes. The Proceeds from Sales program has fluctuated over the years, with FY 1983 and FY 1984 receipts in excess of $200,000.

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
3000-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS

Program and financing (in thousands of dollars)

Identification code 14-9923-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities			
00 01 Federal aid in fish restoration	41181	4197	
00 02 Federal aid in wildlife restoration	101570	95620	95100
00 03 Proceeds from sales, water resources development projects	149	200	200
10 00 Total obligations	142901	100017	95300
Financing			
17 00 Recovery of prior year obligations	-8819		
21 40 Unobligated balance available, start of year	-25143	-15237	-36249
24 40 Unobligated balance available, end of year	15237	36249	36149
40 00 Budget authority (appropriation) (permanent, indefinite, special fund)	124177	121029	95200

FWS-303

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Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS

Program and financing (in thousands of dollars)

Identification code 14-9923-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays:			
71.00 Obligations incurred, net	142901	100017	95300
72.40 Obligated balance, start of year	128103	114475	101513
74.40 Obligated balance, end of year	-114475	-101513	-88113
78.00 Adjustments in unexpired accounts	-8819		
90.00 Outlays	147710	112979	108700

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS

Object classification (in thousands of dollars)

Identification code 14-9923-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation:			
11.1 Full-time permanent	3544	1060	707
11.3 Other than full-time permanent	236	202	
11.5 Other personnel compensation	27	28	28
11.9 Total personnel compensation	3807	1290	735
12.1 Personnel benefits: Civilian	518	204	115
21.0 Travel and transportation of persons	281	200	60
22.0 Transportation of things	46	75	50
23.2 Communications, utilities and other rent	44	75	75
24.0 Printing and reproduction	22	55	25
25.0 Other services	13937	3403	630
26.0 Supplies and materials	97	175	175
31.0 Equipment	98	150	150
41.0 Grants, subsidies, and contributions	124033	94390	93300
99.9 Total obligations	142901	100017	[illegible]

FWS-305

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS
PERSONNEL SUMMARY

Identification code 14-9923-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	120	30	24
Total compensable workyears			
Full-time equivalent employment	100	50	24
Full-time equivalent of overtime and holiday hours	2	2	2
Average GS grade	9.58	9.56	9.55
Average GS salary	20374	20374	20374
Average salary of ungraded positions	22550	22550	22550

FWS-306

STANDARD FORM 300

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS (Pursuant to P.L. [illegible])

Program and financing (in thousands of dollars)

Identification code 14-9923-6-2-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities			
00.01 Federal aid in fish restoration			
00.02 Federal aid in wildlife restoration		-5196	
00.03 Proceeds from sales, water resources development projects		-8	
10.00 Total obligations		-5204	
Financing			
17.00 Recovery of prior year obligations			
21.40 Unobligated balance available, start of year			-5204
24.40 Unobligated balance available, end of year		5204	5204
60.00 Budget authority (appropriation) (permanent, indefinite, special fund)			

STANDARD FORM 300

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS (Pursuant to P.L. [illegible])

Program and financing (in thousands of dollars)

Identification code 14-9927-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Relation of obligations to outlays			
71 00 Obligations incurred, net		-5226	
72 40 Obligated balance, start of year			-2907
74 40 Obligated balance, end of year		2907	
77 00 Adjustments in unexpired accounts			
90 00 Outlays		-2319	-2907

STANDARD FORM 300

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS [illegible]

Object classification (in thousands of dollars)

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		[illegible]	

[illegible]

[illegible]

[illegible]

		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]

[illegible]

studies performed are based on recommendations of technical committees of the GLFC and itemized in annual agreements with the Commission.

The purpose of the Sea Lamprey Control Program is to control populations of the parasitic sea lamprey at levels permitting the establishment of high quality fisheries for salmonids and other valuable sport and commercial fishes. The program consists of surveys of Great Lakes tributary streams to assess sea lamprey spawning, periodic chemical treatment of streams to kill larval lampreys, and evaluation activities to measure adult lamprey abundance. Periodic retreatment every 3-4 years is required to assure that tributary streams, which serve as spawning and nursery areas for lampreys, are not reinfected by adult fish which return from the main lakes to spawn.

Since the inception of the chemical treatment program in 1958, lamprey populations in Lakes Superior, Michigan and Huron have been reduced by 85-90 percent from pre-treatment levels. With present treatment methods and technology, this is probably the maximum practical control that can be achieved. Controlling the populations of lampreys in the lakes proper is impractical because these waters are too large for successful treatment. The GLFC is funding research on possible alternative control methods that may enhance or substitute for the chemical control methods. In FY 1987, about 300 streams will be surveyed to assess lamprey spawning and 55 streams treated to kill larval lampreys. Since the establishment of a successful sea lamprey control program, significant populations of lake trout have been re-established in the Upper Great Lakes by artificial stocking.

The United States' contribution for operation of the Great Lakes Fishery Commission is appropriated to the Department of State, which then provides the funds to the Commission. Funds for sea lamprey control work and research are provided by the Commission to the Fish and Wildlife Service under an annual Memorandum of Agreement laying out the work to be done. The Commission's budget for sea lamprey control in United States waters in FY 1987 is as follows:

	FY 1987 Estimate
Personnel Services	$2,527,000
Travel	312,900
Transportation of Things	7,600
Communications	29,000
Rents and Utilities	150,200
Printing and Reproduction	5,900
Other Contractual Services	201,200
Supplies and Materials	219,100
Equipment	220,100
Administrative Services	168,000
	$3,841,000

Other Contributed Funds

Authorization: 16 U.S.C. 661-666, Fish and Wildlife Coordination Act; 16 U.S.C. 742c-742i, Fish and Wildlife Act of 1956, as amended.

The amount shown for Other Contributed Funds for FY 1987 represents an estimate for planning purposes. This funding represents unsolicited contributions from other governments and/or private organizations and individuals for Service activities. In recent years, total contributions have ranged from about $100,000 to $300,000 annually. These funds are contributed for many varied projects, such as aid in the purchase of certain tracts of land or support for specific research efforts. The individual contributions may range from as little as ten dollars to several thousand dollars and are generally one-time gifts for specific purposes. It is impossible to accurately predict the contributions for a given year.

The Federal Energy Management Program (10 CFR 436) requires that executive agencies prepare plans to reduce the consumption of nonrenewable energy resources in both building and general operations in a cost effective manner. The Service has conducted nationwide studies to identify energy inefficiencies at its facilities and now plans to accomplish the cost effective energy retrofits. The Department of Energy, other Federal agencies, State governments, and private and public utilities all sponsor energy conservation programs which can assist the Service in accomplishing these retrofits. Any funding received by the Service from such programs will be used for energy retrofit work at Service facilities. The estimated $50,000 to $200,000 that may be available from these resources will be deposited in this account to carry out energy conservation activities.

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Case 180
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Case 220

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONTRIBUTED FUNDS

Program and financing (in thousands of dollars)

Identification code 14-8216-0-7-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Sea lamprey control	3462	3841	3841
00.02 Other contributed funds	152	324	324
10.00 Total obligations	3614	4165	4165
Financing:			
21.40 Unobligated balance available, start of year	-384	-845	-845
24.40 Unobligated balance available, end of year	845	845	845
60.00 Budget authority (appropriation) (permanent, indefinite)	4075	4165	4165
Relation of obligations to outlays:			
71.00 Obligations incurred, net	3614	4165	4165
72.40 Obligated balance, start of year	350	352	614
74.40 Obligated balance, end of year	-352	-614	-857
90.00 Outlays	3610	3903	3922

FWS-313

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONTRIBUTED FUNDS

Object classification (in thousands of dollars)

Identification code 14-8216-0-7-303	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation:			
11.1 Full-time permanent	1964	1974	2121
11.3 Other than full-time permanent	186	356	204
11.5 Other personnel compensation	44	81	81
11.9 Total personnel compensation	2194	2411	2506
12.1 personnel benefits: civilian	295	381	396
21.0 Travel and transportation of persons	296	300	177
22.0 Transportation of things	3	16	16
23.2 Communications, utilities, and other rent	97	100	100
24.0 Printing and reproduction	6	5	5
25.0 Other services	282	440	453
26.0 Supplies and materials	306	312	312
31.0 Equipment	128	200	200
32.0 Lands and structures	5		
99.9 Total obligations	3614	4165	4165

STANDARD FORM 300
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Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONTRIBUTED FUNDS
PERSONNEL SUMMARY

Identification code 14-8216-0-7-303	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	67	67	72
Total compensable workyears:			
Full-time equivalent employment	99	93	93
Full-time equivalent of overtime and holiday hours	3	3	3
Average ES salary			
Average GS grade	9.58	9.54	9.55
Average GS salary	29374	29374	29374
Average salary of ungraded positions	22550	22550	22550

FWS-315

(Memo cut: 21.8) (Memo cut: 8) (Memo cut: 8) (Memo cut: 4.8)

Type size:
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Case 180
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Case 210

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONTRIBUTED FUNDS (Pursuant to P L 99-177)

Program and financing (in thousands of dollars)

Identification code 14-8216-6-7-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.01 Sea lamprey control		-5	
00.02 Other contributed funds		-1	
10.00 Total obligations		-6	
Financing			
21.40 Unobligated balance available, start of year			-6
24.40 Unobligated balance available, end of year		6	6
60.00 Budget authority (appropriation) (permanent, indefinite)			
Relation of obligations to outlays			
71.00 Obligations incurred, net		-6	
72.40 Obligated balance, start of year			
74.40 Obligated balance, end of year			
90.00 Outlays		-6	

FWS-316

(Memo cost: 21.8)	(Memo cost: 8)	(Memo cost: 4)	(Memo cost: 4.8)

Type size: 8 point 22 picas Copy 100 Red underscore Case 200

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONTRIBUTED FUNDS (Pursuant to P.L. 99-177)

Object classification (in thousands of dollars)

Identification code 14-8216-6-7-302	19 85 actual	19 86 estimate	19 87 estimate
92.0 Undistributed		-6	
(Mono cast: 21.5)	(Mono cast: 8)	(Mono cast: 8)	(Mono cast: 6.9)

Justification of Program and Performance

Activity: Operation and Maintenance of Quarters
Subactivity: Quarters Rental

(Dollar amounts in thousands)

Rental Receipts		1986 Enacted To Date	1986 Adjusted Approp.	1987 Base	1987 Estimate	Inc. (+) Dec. (-) from Base
Quarters Operation & Maintenance	$	1,430	1,430	1,430	1,530	+100
Quarters Administration	$	70	70	70	70	0
Total Requirements	$	1,500	1,500	1,500	1,600	+100
	(FTE-T)	(16)	(16)	(16)	(0)	(0)

Gramm-Rudman-Hollings Impact:

	FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
Quarters Operation & Maintenance	1,500	-65	1,435

As a result of P.L. 99-177, $65 thousand in obligational authority will not be available for the Operation and Maintenance of Quarters program in FY 1986. This will delay activities relating to conducting and implementing surveys for establishing rental rates. Lower priority maintenance projects at some government-owned quarters will also have to be postponed; however, these actions are not expected to result in the degradation of any units to an unacceptable condition.

Authorization: Section 320 of the General Provisions of the FY 1985 Interior and Related Agencies Appropriations Act (P.L. 98-473) provides that all rents and charges collected by payroll deduction or otherwise for the use or occupancy of quarters of agencies funded by the Act shall be deposited in a special fund. Funds remain available until expended for the maintenance and operation of the quarters of that agency at the unit (e.g., park, refuge, hatchery, etc.) where the funds are collected. Up to 10 percent of the funds collected at any such unit may be transferred to other units within the same agency.

Objective: To provide for maintenance and operation of Fish and Wildlife Service quarters through utilization of rental receipts.

Base Program: In certain designated circumstances, it is necessary for Service personnel to occupy government-owned quarters. Such circumstances include isolation of the site, protection of fish hatchery stocks (e.g., water flow to fish tanks could be interrupted by freeze), health and welfare of overnight visitors, and protection of government property.

Quarters require regular operational upkeep as well as periodic rehabilitation and upgrading to maintain safe and healthful conditions for occupants. Rental receipts are utilized for general maintenance and repair of quarters buildings; code and regulatory improvements; retrofitting for energy efficiency; correction of safety related deficiencies; utilities, access roads, grounds and other site maintenance services; and the purchase of replacement equipment such as household appliances, air conditioners, furnaces, etc. Receipts are also used for basic operational costs including utilities, i.e., water, gas, electricity; lease agreements; and routine maintenance costs which continue when housing units are vacant (the Service's vacancy rate is approximately 25-30%).

Funds are also provided from rental receipts for administration of the Service's quarters management function. This administrative function includes funding of a Quarters Management Specialist, payment to the Department for performance of regional rental surveys, implementation of survey results, and travel costs associated with presentation of survey results.

Rental rates are based upon comparability with the private sector in accordance with Office of Management and Budget Circular A-45. Funds, not to exceed 10% of total receipts at any unit, may be transferred to other units for quarters operation and maintenance costs. The Service's estimated receipts for quarters in FY 1987 are $1.6 million, which will be utilized for the operation and maintenance of quarters at refuges, hatcheries, and research facilities.

Change for FY 1987

		1987 Base	1987 Estimate	Inc (+) or Dec (-)
Quarters Operation and Maintenance.	($000)	1,430	1,530	+100

The increase in receipts from quarters rental is expected to occur as a result of three factors. First, rental rates will be raised for some units as a result of general increase in rental rates in certain areas as determined by rental surveys. Second, the condition of some quarters has been substantially upgraded using funds made available through this account, and rental rates have been raised to reflect improvements. Finally, some quarters previously vacant will be occupied resulting in additional rental receipts.

Object Class Description

The object class detail for the $100,000 increase is as follows:

Other Services	$100,000

Summary of Requirements by Object Class
(Dollar amounts in thousands)

Appropriation: Operation and Maintenance
Account of Quarters

		1987 Base		1987 Estimate		Inc(+)/Dec(-)	
		FTE-T	Amount	FTE-T	Amount	FTE-T	Amount
Object Class							
11.	Personnel Compensation						
11.1	Permanent Positions	16	471	16	471	...	...
11.5	Other Personnel Compensation	...	10	...	10	...	...
	Total Personnel Compensation	16	481	16	481	...	...
Other Objects							
12.1	Personnel Benefits	...	76	...	76	...	...
21.0	Travel and Transportation of Persons	...	15	...	11	...	...
22.0	Transportation of things	...	7	...	7	...	...
23.2	Communications, Utilities, and Other Rent	...	45	...	45	...	...
24.0	Printing and Reproduction	...	2	...	2	...	...
25.0	Other Services	...	424	...	512	...	...
26.0	Supplies and Materials	...	400	...	416	...	...
31.0	Equipment	...	30	...	30	...	...
32.0	Lands and Structures	...	20	...	20	...	...
	Total Requirements	16	1,500	16	1,600	...	...

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
OPERATION AND MAINTERNANCE OF QUARTERS

Program and financing (in thousands of dollars)

Identification code 14-5050-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.02 Quarters and maintenance, Fish and Wildlife Service	1109	1475	1600
10.00 Total obligations	1109	1475	1600
Financing:			
21.40 Unobligated balance available, start of year		-345	-370
24.40 Unobligated balance available, end of year	345	370	370
60.00 Budget authority (appropriation) (permanent, special fund)	1454	1500	1600
Relation of obligations to outlays			
71.00 Obligations incurred, net	1109	1475	1600
72.40 Obligated balance, start of year		170	120
74.40 Obligated balance, end of year	-170	-120	-103
90.00 Outlays	939	1525	1617
(Memo meas: 31.0)	(Memo meas: 6)	(Memo meas: 5)	(Memo meas: 4.8)

FWS-321

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
OPERATION AND MAINTENANCE OF QUARTERS

Object classification (in thousands of dollars)

Identification code 14-5050-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Personnel compensation:			
11.1 Full-time permanent	229	471	471
11.3 Other than full-time permanent	43		
11.5 Other personnel compensation	2	10	10
11.9 Total personnel compensation	274	481	481
12.1 personnel benefits civilian	34	76	76
21.0 Travel and transportation of persons	9	15	11
22.0 Transportation of things	1	7	7
23.2 Communications, utilities, and other rent	41	45	45
24.0 Printing and reproduction	2	2	2
25.0 Other services	206	399	512
26.0 Supplies and materials	396	409	416
31.0 Equipment	120	30	20
32.0 Lands and structures	18	20	20
99.9 Total obligations	1109	1475	1600

FWS-322

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
OPERATION AND MAINTENANCE OF QUARTERS
PERSONNEL SUMMARY

Identification code 14-5050-0-2-303	19 85 actual	19 86 estimate	19 87 estimate
Total number of full-time permanent positions	8	16	16
Total compensable workyears:			
Full-time equivalent employment	8	16	16
Full-time equivalent of overtime and holiday hours			
Average ES salary			
Average GS grade	9.58	9.54	9.55
Average GS salary	29374	29374	29374
Average salary of ungraded positions	22550	22550	22550

FWS-323

(Memo cost: [illegible])	(Memo cost: [illegible])	(Memo cost: [illegible])	(Memo cost: [illegible])

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
OPERATION AND MAINTERNANCE OF QUARTERS (Pursuant to P.L. 99-17

Program and financing (in thousands of dollars)

Identification code 14-5050-6-2-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities:			
00.02 Quarters and maintenance, Fish and Wildlife Service			
10.00 Total obligations		-65	
Financing:			
21.40 Unobligated balance available, start of year			-65
24.40 Unobligated balance available, end of year		65	65
60.00 Budget authority (appropriation) (permanent, special fund)			
Relation of obligations to outlays:			
71.00 Obligations incurred, net		-65	
72.40 Obligated balance, start of year			-22
74.40 Obligated balance, end of year		22	
90.00 Outlays		-43	-22

FWS-324

(Memo cmt: 31.8)	(Memo cmt: 8)	(Memo cmt: 8)	(Memo cmt: 4.8)

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STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
OPERATION AND MAINTERNANCE OF QUARTERS (Pursuant to P.L. 99-177)

Object classification (in thousands of dollars)

Identification code 14-5050-6-2-303	19 85 actual	19 86 estimate	19 87 estimate
92.0 Undistributed		-65	
(Memo cnt: 21.3)	(Memo cnt: 8)	(Memo cnt: 8)	(Memo cnt: 4.9)

Type size:
8 point
14½ picas
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STANDARD FORM 306
July 1966, Bureau of the Budget
Circular No. A-11, Revised.
300-108

DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
CONSOLIDATED SCHEDULE OF PERMANENT POSITIONS

DETAIL OF PERMANENT POSITIONS

	1985 actual	1986 estimate	1987 estimate
Executive Level V	1	1	1
Subtotal	1	1	1
ES-6	1	1	1
ES-5	7	7	7
ES-4	8	8	8
ES-3	4	4	4
ES-2	1	1	1
Subtotal	21	21	21
GS/GM 15	70	66	64
GS/GM 14	229	225	220
GS/GM 13	673	655	641
GS-12	923	920	910
GS-11	911	883	850
GS-10	4	5	5
GS-9	545	579	560
GS-8	43	41	41
GS-7	446	485	460
GS-6	281	271	267
GS-5	600	575	562
GS-4	235	245	229
GS-3	83	85	85
GS-2	11	15	15
Subtotal	5,054	5,050	4,909
Upgraded	662	668	620
Total permanent positions	5,738	5,740	5,551
Unfilled positions end of year	-217	-180	-160
Total permanent positions, end of year	5,521	5,560	5,391

FWS-326

(Mono cast: 18.3) (Mono cast: 4.9) (Mono cast: 4.9) (Mono cast: 4)

Department of Interior

FY 1987 Budget for Consulting Services

Bureau: Fish and Wildlife Service

Appropriation Account Title/ Iden. Code No.	Amount Requested in FY 1987 ($000)	Program Requiring Services	Description of Need for Services
Resource Management (14-1611-0-1-303)	555 (Est.)	Wildlife Resources	Completion of Archaeological and historic surveys, evaluations, and mitigation work in support of Service projects. Work is undertaken to meet requirements of the National Historic Preservation Act and the Archaeological Resources Protection Act.
Resource Management (14-1611-0-1-303)	10	National Wildlife Health Laboratory	Histological analyses of waterfowl parts in support of National monitoring efforts.
Resource Management (14-1611-0-1-303)	8	National Wildlife Health Laboratory	Medical exams of lab personnel routinely exposed to disease organisms and toxic materials.
Resource Management (14-1611-0-1-303)	20	Patuxent Wildlife Research Center	Services for review of chemical lab practices (safety and Good Lab Practices)
Resource Management (14-1611-0-1-303)	40	Patuxent Wildlife Research Center	Contaminant database software study Service wide integration.

Appropriation Account Title/ Iden. Code No.	Amount Requested in FY 1987 ($000)	Program Requiring Services	Description of Need for Services
Resource Management (14-1611-0-1-303)	8	Patuxent Wildlife Research Center	Radio-telemetry
Resource Management (14-1611-0-1-303)	24	Patuxent Wildlife Research Center	Contract with USDA for mongoose control in Hawaii
Resource Management (14-1611-0-1-303)	5	Patuxent Wildlife Research Center	Medical exams of lab personnel routinely exposed to disease organisms and toxic materials
Resource Management (14-1611-0-1-303)	2	Northern Prairie Wildlife Research Center	Lab support (primarily chemical) from private organizations to augment in-house research efforts.
Resource Management (14-1611-0-1-303)	5	Northern Prairie Wildlife Research Center	Multispectral scanner analyses by NASA
Resource Management (14-1611-0-1-303)	30 (est)	Fishery Resources	Archeological surveys as required at sites of various proposed maintenance/ rehabilitation projects at fish hatcheries or fish research laboratories.

Appropriation Account Title/ Iden. Code No.	Amount Requested in 1987 $000	Program Requiring Services	Description Need for Services
Resource Management (14-1611-0-1-303)	3,000	Habitat Resources National Wetland Inventory	Contracts for photo interpretation, field work, and classical and computer generated map production in order to meet NWI map production requirements.
Resource Management (14-1611-0-1-303)	2,350	Biological Services	Technical support services providing assistance and management of map-based geographic and spatial data input and computer analyses for various land and water management impact analyses; also includes some support to the National Wetland Inventory.
Resource Management (14-1611-0-1-303)	1,550	Research and Development	Organic and inorganic chemical analyses in support of environmental contaminant research and operational monitoring and special studies.
Resource Management (14-1611-0-1-303)	35	Habitat Resources Field Operations	Expand Choptank River NPS (non point source) study. Broaden water quality assessment and implementation regarding the watersheds living resources.
Resource Management (14-1611-0-1-303)	35	Habitat Resources Field Operations	NPS evaluation in Virginia. Select NPS problem watershed in Virginia and pursue similar effort there as is being conducted in Choptank watershed. Contract water quality assessment.
Resource Management (14-1611-0-1-303)	30	Habitat Resources Field Operations	Enhance examination of toxic substance impacts on fish and wildlife and expand direct examination of specific NPDES sites, including body burden analysis.

Appropriation Account Title/ Iden. Code No.	Amount Requested FY 1987 ($000)	Program Requiring Service	Description
Resource Management (14-1611-0-1-303)	30	Habitat Resources Field Operations	Summarize existing NPDES permit data to estimate gross toxic loads entering the Chesapeake Bay, particularly in high resource areas.
Resource Management (14-1611-0-1-303)	20	Habitat Resources Field Operations	Incorporate histopathology examination and bioassay laboratory studies into assessments of toxic impact of fish and wildlife.
Resource Management (14-1611-0-1-303)	50	Habitat Resources Field Operations	Photograph, analyze, and map distribution of submerged aquatic vegetation (SAV) in the Chesapeake Bay.
Resource Management (14-1611-0-1-303)	30	Habitat Resources Field Operations	Conduct analysis of waterfowl trends over the past several decades, especially for Canvasback, geese and Black ducks-Chesapeake Bay.
Resource Management (14-1611-0-1-303)	25	Habitat Resources Field Operations	Conduct assessment of Black duck breeding habitat in Chesapeake and cause determine this species' local decline.
Resource Management (14-1611-0-1-303)	15	Habitat Resources Field Operations	Submerged aquatic vegetation transplanting and cloning studies for possible restoration techniques-Chesapeake Bay.
Resource Management (14-1611-0-1-303)	30	Habitat Resources Field Operations	Public education via various forms of mass media presentations and attractive educational materials for public and private schools - Chesapeake Bay.
Resource Management (14-1611-0-1-303)	25	Habitat Resources Field Operations	Print educational materials for dissemination to public and private schools and conservation organizations.
Resource Management (14-1611-0-1-303)	10	Habitat Resources Field Operations	Develop formal BMP training program for soil conservation specialists and farmers in cooperation with SCS and State agricultural agencies.

Appropriation Account Title/ Iden. Code No.	Amount Requested in 1987	Program Requiring Services	Description of Need for Services
Resource Management (14-1611-0-1-303)	15	Habitat Resources Field Operations	Examine the effectiveness of mitigation by FWS within Chesapeake watershed.
Resource Management (14-1611-0-1-303)	10	Wildlife Resources	Promotional efforts related to the Duck Stamp program with major private corporations.
Total, Resource Management	$7,967		
Federal Assistance (14-9923-0-2-303)	10	Federal Assistance	Promotional efforts related to the Pittman-Robertson program.
Total, Federal Assistance	$ 10		
Construction an Anadromous Fish (14-1612-0-1-303	(est)	Fishery Resources	Archeological surveys as required at sites of various proposed construction/rehabilitation projects at fish hatcheries or fish research laboratories.
Architect-Engineer and related services (14-1612-0-1-303)	1,770(est)	Service-wide	Architect-Engineer consulting services for Title II preparation of plans and contract documents, and Title III construction inspection of projects funded in the Construction and Anadromous Fish Appropriation.
Total, Construction	$1,800		

U.S. Fish and Wildlife Service
Administrative Provisions

Appropriations and funds available to the United States Fish and Wildlife Service shall be available for [purchase of not to exceed 191 passenger motor vehicles of which 178 are for replacement only (including 67 for police-type use);] purchase of [4] 1 new aircraft for replacement only; [acceptance of one donated aircraft as an addition;] not to exceed [$300,000] $400,000 for payment, at the discretion of the Secretary, for information, rewards, or evidence concerning violations of laws administered by the United States Fish and Wildlife Service, and miscellaneous and emergency expenses of enforcement activities, authorized or approved by the Secretary and to be accounted for solely on his certificate; repair of damage to public roads within and adjacent to reservation areas caused by operations of the United States Fish and Wildlife Service; options for the purchase of land at not to exceed $1 for each option; facilities incident to such public recreational uses on conservation areas as are consistent with their primary purpose; and the maintenance and improvement of aquaria, buildings, and other facilities under the jurisdiction of the United States Fish and Wildlife Service and to which the United States has title, and which are utilized pursuant to law in connection with management and investigation of fish and wildlife resources.

(Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Administrative Provisions
Explanation of Language Changes

Vehicles

Language has been deleted requesting authority to purchase passenger vehicles in 1987. The extent of the Service's vehicle replacement requirements will be met from current inventory.

Aircraft

The Service aircraft requirements for the lower 48 states include the purchase of one Cessna 182. It will be based at the Northern Prairie Wildlife Research Center; and will serve continued waterfowl management needs such as fall flight surveys and breeding ground surveys. The estimated cost is $110,000.

Payment of Rewards

The increase from $300,000 to $400,000 authority for payment at the discretion of the Secretary for information, rewards or evidence is necessary due to the large number of extensive covert operations the Service has been conducting during recent years. During fiscal year 1984, the Service paid over $200,000 for expenses for payments of information, rewards and evidence. With an expanding law enforcement activity, the current administrative provision may unnecessarily restrict the Service in aggressively pursuing law enforcement investigations. The Service has recently established a mechanism for payment of rewards related to investigations of Lacey Act violations from penalities, fines and forfeitures collected by the courts. Although these funds are treated as an offsetting collection, the administrative provision places a limitation on the annual payment level.

Justification of Program and Performance

	1986 Enacted to Date	Proposal Recission	Revised Request
Land Acquisition	38,688	-4,951	33,737

Authorization: 16 U.S.C. 460k-4-11, The Land and Water Conservation Fund Act of 1965 as amended and 16 U.S.C. 1530, Endangered Species Act of 1973.

Objective: The objective is to achieve savings in specific land acquisitions.

Description: This recission is proposed to effect savings from Federal projects where land acquisition is no longer necessary. The distribution of savings by acquisition of savings by acquisition project follows:

	($000)
Tortuguero, Puerto Rico	$4,000
Bon Secour, Alabama	951
TOTAL	$4,951

Justification for Recission:

Bon Secour, Al - The original acquisition of the refuge was to preserve fragile barrier island habitat along the Alabama Gulf Coast. Through FY 1985, $18,162,000 has been appropriated for the acquisition of this refuge to acquire nearly 4,000 acres. An additional 8,000 acres covering more than 100 ownerships remain to be acquired. The refuge contains habitat for the endangered Alabama Beach Mouse. Since the majority of critical habitat for this species has been acquired, further acquisition can be deferred without irreversible impact on the species.

FY 1985 Carryover	$-0-
FY 1986 Appropriation	$951,000
Obligated to date FY 1986	$-0-
Available for Rescission	$951,000

Tortuguero, PR - The Puerto Rico Planning Board has advised the Service that they have enacted a policy which will protect the natural resources at Tortuguero. Assumption of responsibility by the Commonwealth will make it unnecessary for the Service to continue with acquisition of this property.

FY 1985 Carryover	$4,500,000
Reserved for Cartagena Lagoon	500,000
Obligated to date FY 1986	$-0-
Available for Rescission	$4,000,000

Type size:
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Case 310

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

Rescission Proposal
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION

Program and Financing (in thousands of dollars)

Identification code 14-5020-5-1-303	19 85 actual	19 86 estimate	19 87 estimate
Program by activities			
2. Specifically legislated	...	-951	...
5. Fish and Wildlife Act	...	-4,000	...
10.00 Total Obligations	...	-4,951	...
Financing:			
40.0001 Budget authority (appropriation rescission proposal - R 86-57)	...	-4,951	...
Relation of obligations to outlays:			
71.0001 Obligations incurred, net	...	-4,951	...
72.4001 Obligated balance, start of year	...	...	-1,980
74.4001 Obligated balance, end of year	...	+1,980	...
90.0001 Outlays	...	-2,971	-1,980

FWS-335

(Mono cast: 21.0) (Mono cast: 8) (Mono cast: 8) (Mono cast: 4.0)

Type size:
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Case 310

STANDARD FORM 300
July 1964, Bureau of the Budget
Circular No. A-11, Revised.
300-101

Rescission Proposal
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
LAND ACQUISITION

Object Classification (in thousands of dollars)

Identification code 14-5020-5-1-303	19 85 actual	19 86 estimate	19 87 estimate
Direct obligations:			
32.0 Lands and structures............	...	-4,951	...
99.9 Total obligations..........	...	-4,951	...

FWS-336

(Mono cast: 31.5) (Mono cast: 8) (Mono cast: 8) (Mono cast: 4.9)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
ALABAMA			
FISH HATCHERIES			
CARBON HILL NFH	135 (4)	129 (4)	
ECOLOGICAL SERVICES			
DAPHNE ECO SVCS	258 (6)	231 (7)	236(7)
WILDLIFE REFUGES			
CHOCTAW NWR	184 (4)	128 (4)	124(4)
EUFAULA NWR	331 (2)	261 (2)	236(2)
BON SECOUR NWR	84 (1)	53 (1)	154(1)
WHEELER NWR	439 (9)	493 (9)	526(9)
LAW ENFORCEMENT			
MONTGOMERY LE - SRA	251 (6)	265 (7)	260(7)
FISHERY RESEARCH			
SE FISH CUL LAB	391 (9)	352 (11)	355(11)
COOPERATIVE RESEARCH			
AUBURN UNIV	149 (2)	166 (2)	159(2)
STATE TOTAL	2,222(43)	2,078(47)	2,053(43)
ALASKA			
FISH SERVICES			
KENAI FISHERY SVCS	279 (2)	273 (4)	276(4)
FAIRBANKS FISHERY SVCS	551 (8)	649 (9)	652(9)
KING SALMON FISHERY STA	342 (4)	317 (4)	330(4)
ENDANGERED SPECIES			
FAIRBANKS END SPECIES	76 (2)	69 (2)	69(2)
ECOLOGICAL SERVICES			
JUNEAU ECO SVCS	561 (7)	492 (11)	492(11)
ANCHORAGE ECO SVCS	377 (8)	376 (9)	376(9)
FAIRBANKS ECO SVCS	416 (7)	456 (9)	496(9)
ANCHORAGE SPEC STUDIES	249 (6)	578 (13)	662(13)
WILDLIFE REFUGES			
ALASKA MARITIME NWR	1,316 (16)	1,420 (16)	1,192(16)
ALASKA PENINSULA NWR	297 (2)	260 (3)	205(3)
BECHAROF NWR	392 (4)	327 (3)	290(3)
IZEMBEK NWR	385 (4)	389 (5)	370(5)
KENAI NWR	1,297 (12)	1,420 (21)	1,235(22)
KODIAK NWR	726 (9)	695 (10)	636(10)
TOGIAK NWR	369 (3)	362 (2)	305(4)

	FY 1985 ACTUAL $	(FTE)	FY 1986 ESTIMATE $	(FTE)	FY 1987 ESTIMATE $	(FTE)
ALASKA						
WILDLIFE REFUGES						
YUKON DELTA NWR	1,395	(11)	1,396	(14)	1,261	(14)
ARCTIC NWR	1,405	(15)	1,203	(15)	967	(15)
INNOKO NWR	374	(3)	341	(3)	288	(3)
KANUTI NWR	282	(3)	290	(3)	262	(3)
KOYUKUK NWR	321	(3)	360	(5)	326	(5)
NOWITNA NWR	369	(3)	345	(3)	312	(3)
SELAWIK NWR	338	(3)	302	(3)	291	(3)
TETLIN NWR	363	(4)	387	(4)	406	(4)
YUKON FLATS NWR	512	(6)	555	(6)	402	(6)
RAPTOR MGMT WA	256	(5)	253	(5)	260	(5)
WATERFOWL INVEST WA	291	(3)	240	(2)	250	(2)
MIGRATORY BIRDS MGMT WA	112	(1)	110	(1)	117	(1)
LAW ENFORCEMENT						
ANCHORAGE LE - SAC	355	(7)	349	(7)	344	(8)
ANCHORAGE LE - SRA	228	(2)	234	(3)	232	(3)
FAIRBANKS LE - SRA	266	(3)	232	(4)	236	(4)
FISH CO-OP UNITS						
UNIV OF ALASKA	136	(2)	123	(2)	118	(2)
FISHERY RESEARCH						
ANCHORAGE RESEARCH	1,602	(20)	2,707	(20)	2,490	(20)
COOPERATIVE RESEARCH						
UNIV OF ALASKA	123	(2)	97	(1)	83	(1)
STATE TOTAL	16,241	(190)	17,490	(221)	16,351	(225)
ARIZONA						
FISH HATCHERIES						
ALCHESAY NFH	46		62		27	
WILLOW BEACH NFH	396	(5)	379	(6)	362	(6)
HATCHERY BIOL PINETOP	50	(1)	49	(1)	51	(1)
ECOLOGICAL SERVICES						
PHOENIX ECO SVCS	179	(5)	170	(6)	196	(6)
WILDLIFE REFUGES						
BUENOS AIRES NWR	237	(3)	66	(8)	304	(7)
CIBOLA NWR	224	(4)	245	(5)	297	(5)
IMPERIAL NWR	246	(5)	259	(5)	228	(5)
KOFA NWR	258	(7)	282	(8)	241	(8)
CABEZA PRIETA GAME NWR	190	(5)	187	(5)	177	(5)
WILDLIFE MANAGEMENT						
PHOENIX WA	382	(9)				

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
ARIZONA			
LAW ENFORCEMENT			
PHOENIX LE - SRA	318 (7)	320 (6)	323(6)
COOPERATIVE RESEARCH			
UNIV OF ARIZONA	207 (3)	222 (3)	212(3)
STATE TOTAL	2,733(54)	2,241(53)	2,328(52)
ARKANSAS			
FISH HATCHERIES			
GREERS FERRY NFH	258 (6)	398 (6)	282(6)
HEBER SPRINGS BIOLOGIST	52 (1)	50 (1)	54(1)
MAMMOTH SPRINGS NFH	179 (4)	146 (4)	( )
NORFORK NFH	517 (8)	920 (10)	492(10)
WILDLIFE REFUGES			
BIG LAKE NWR	153 (4)	213 (4)	196(4)
FELSENTHAL NWR	386 (8)	397 (8)	360(8)
HOLLA BEND NWR	221 (4)	200 (4)	190(4)
WAPANOCCA NWR	194 (5)	200 (5)	209(5)
WHITE RIVER NWR	344 (5)	492 (5)	379(5)
WILDLIFE MANAGEMENT			
LITTLE ROCK WA	99 (2)	22 (1)	47(1)
STUTTGART WA	140 (2)		
FISH CO-OP UNITS			
ARKANSAS TECH	103 (2)	60 (2)	60(2)
FISHERY RESEARCH			
FISH FARM EXP LAB	343 (11)	333 (11)	330(11)
STATE TOTAL	2,989(62)	3,431(61)	2,599(57)
CALIFORNIA			
FISH HATCHERIES			
COLEMAN NFH	674 (10)	664 (15)	663(15)
TEHAMA COLUSA FISH FACIL	346 (8)	333 (10)	342(10)
FISH SERVICES			
RED BLUFF FISH ASSIST	103 (3)	97 (3)	97(3)
STOCKTON FISH ASSIST	46 (1)	57 (1)	57(1)
ENDANGERED SPECIES			
SACRAMENTO END SPEC	605 (13)	460 (12)	476(12)

	FY 1985 ACTUAL $(FTE)		FY 1986 ESTIMATE $(FTE)		FY 1987 ESTIMATE $(FTE)	
CALIFORNIA						
ENDANGERED SPECIES						
SEA OTTER COORD - SACRAM	172	(4)	168	(4)	168(	4)
ECOLOGICAL SERVICES						
SACRAMENTO ECO SVCS	390	(10)	469	(16)	467(	16)
LAGUNA NIGUEL FLD STA	258	(7)	300	(10)	300(	10)
WILDLIFE REFUGES						
HUMBOLDT BAY NWR	11	(1)	17	(1)	17(	1)
KERN NWR	578	(9)	553	(9)	516(	9)
SACRAMENTO NWR	1,046	(18)	1,219	(18)	1,146(	18)
SALTON SEA NWR	360	(7)	445	(7)	373(	7)
TIJUANA SLOUGH		( )		( )	50(	)
SAN FRANCISCO BAY NWR	808	(16)	1,026	(16)	934(	16)
SAN LUIS NWR	693	(11)	713	(11)	656(	11)
KLAMATH BASIN NWR	956	(18)	866	(17)	854(	17)
DISEASE BIOLOGIST	40	(1)		( )	(	)
MODOC NWR	306	(6)	214	(6)	200(	6)
HAVASU NWR	293	(5)	315	(6)	295(	6)
WILDLIFE MANAGEMENT						
SACRAMENTO WA	1,233	(24)				
LAW ENFORCEMENT						
SACRAMENTO LE - SAC	279	(5)	259	(4)	262(	4)
LOS ANGELES LE - SRA	279	(5)	345	(5)	350(	5)
FISH CO-OP UNITS						
HUMBOLDT STATE	107	(2)	108	(2)	103(	2)
WILDLIFE RESEARCH						
CAL CONDOR-VENTURA		( )	631	(2)	341(	2)
NO PRAIRIE-DAVIS	265	(6)	391	(7)	692(	7)
DENV WILDLF SAN SIMEON	645	(8)	167	(4)	167(	4)
SANTA CRUZ		( )	128	(2)	128(	2)
STATE TOTAL	10,493(	198)	9,945(	188)	9,654(	188)
COLORADO						
FISH HATCHERIES						
FISH DISEASE CONTROL LAB	206	(5)	181	(6)	192(	6)
HOTCHKISS NFH	240	(6)	211	(5)	250(	5)
LEADVILLE NFH	219	(4)	253	(4)	238(	4)
FISH SERVICES						
DENVER FISH ASSIST	34	(1)	28	(1)	29(	1)
BIOLOGICAL SERVICES						
NAT WESTERN ENERGY TEAM	3,004	(52)	3,036	(70)	3,029(	70)

	FY 1985 ACTUAL $(FTE)		FY 1986 ESTIMATE $(FTE)		FY 1987 ESTIMATE $(FTE)	
COLORADO						
BIOLOGICAL SERVICES						
FT COLLINS EDITOR OFFICE	1,073	(25)	648	(20)	643(	20)
WILDLIFE REFUGES						
MONTE VISTA NWR	495	(6)	511	(11)	479(	11)
ARAPAHOE NWR	190	(4)	266	(4)	236(	4)
BROWNS PARK NWR	182	(2)	211	(4)	199(	4)
WILDLIFE MANAGEMENT						
DENVER WA	659	(5)				
LAW ENFORCEMENT						
DENVER LE - SAC	709	(18)	930	(18)	916(	18)
COOPERATIVE RESEARCH						
COLORADO STATE	219	(2)	168	(2)	116(	2)
WILDLIFE RESEARCH						
DENVER W/L RES CNTR	4,373	(71)	95	(1)	95(	1)
FT COLLINS ECOSYS STUDY	724	(12)	803	(13)	897(	13)
STATE TOTAL	12,327(	213)	7,341(	159)	7,319(	159)
CONNECTICUT						
WILDLIFE REFUGES						
CONN COASTAL NWR					80(	2)
STATE TOTAL					80(	2)
DELAWARE						
WILDLIFE REFUGES						
BOMBAY HOOK NWR	440	(11)	461	(11)	397(	11)
WILDLIFE RESEARCH						
ATHENS			251	(3)	251(	3)
STATE TOTAL	440(	11)	712(	14)	648(	14)
FLORIDA						
FISH HATCHERIES						
WELAKA NFH	292	(7)	269	(7)	252(	7)
FISH SERVICES						
PANAMA CITY FL BIOLOGIST	182	(3)	162	(4)	165(	4)
ENDANGERED SPECIES						
JSVL END SPECIES	456	(11)	492	(11)	492(	11)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
FLORIDA			
ECOLOGICAL SERVICES			
PANAMA CITY ECO SVCS	303 (7)	293 (7)	300(7)
VERO BEACH ECO SVCS	274 (7)	291 (7)	300(7)
WILDLIFE REFUGES			
JACKSONVILLE BIOLOGIST	57 (1)	60 (1)	73(1)
CHASSAHOWITZKA NWR	334 (5)	360 (5)	324(5)
LAKE WOODRUFF NWR	116 (3)	126 (3)	140(3)
LOXAHATCHEE NWR	688 (14)	768 (14)	749(14)
MERRITT ISLAND NWR	1,004 (15)	645 (15)	638 (15)
NATIONAL KEY DEER NWR	153 (3)	208 (3)	218(3)
ST MARKS NWR	447 (13)	443 (13)	446(13)
ST VINCENT NWR	153 (2)	186 (2)	156(2)
WILDLIFE MANAGEMENT			
TALLAHASSEE FL WA	64 (1)	9	20
LAW ENFORCEMENT			
TALLAHASSEE LE - SRA	305 (7)	328 (6)	331(6)
MIAMI LE - SRA	510 (12)	465 (12)	466(12)
RESEARCH CO-OP UNITS			
UNIV OF FLA GAINESVILLE	106 (1)	112 (2)	107(2)
FISHERY RESEARCH			
NAT FISH RES LAB	401 (7)	562 (8)	410(8)
WILDLIFE RESEARCH			
GAINESVILLE		181 (3)	181(3)
STATE TOTAL	5,845(119	5,960 (123)	5,768 (123)
GEORGIA			
FISH HATCHERIES			
CHATTAHOOCHEE FOREST NWR	241 (6)	215 (6)	249(6)
MILLEN NFH	181 (5)	273 (5)	180(5)
WARM SPRINGS NFH	127 (3)	126 (3)	
ECOLOGICAL SERVICES			
BRUNSWICK ECO SVCS	137 (3)	125 (3)	130(3)
WILDLIFE REFUGES			
OKEFENOKEE NWR	700 (9)	687 (9)	608(9)
SAVANNAH COASTAL COMPLEX	1,114 (9)	840 (9)	757(9)
PIEDMONT NWR	315 (7)	349 (7)	325(7)
WILDLIFE MANAGEMENT			
BRUNSWICK GA WA	58 (2)	16 (1)	45(1)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
GEORGIA			
LAW ENFORCEMENT			
ATLANTA LE - SAC	420 (9)	432 (12)	418(12)
COOPERATIVE RESEARCH			
UNIV OF GEORGIA	124 (3)	199 (3)	171(3)
STATE TOTAL	3,417(56)	3,252(58)	2,883(55)
HAWAII			
ENDANGERED SPECIES			
HAWAII END SPECIES COORD	366 (10)	419 (9)	419(9)
WILDLIFE REFUGES			
HI/PAC ISLANDS NWR	991 (15)	932 (15)	949(15)
FISH CO-OP UNITS			
UNIV OF HAWAII	73 (1)	69 (1)	70(1)
WILDLIFE RESEARCH			
MAUI		92 (2)	92(2)
HAWAII NAT PARK		208 (5)	208(5)
STATE TOTAL	1,430(26)	1,720(32)	1,738(32)
IDAHO			
FISH HATCHERIES			
DWORSHAK NFH	158 (3)	163 (3)	180(3)
DWORSHAK FISH HEALTH CNTR	102 (2)	99 (4)	103(4)
HAGERMAN NFH	447 (4)	505 (6)	562(6)
KOOSKIA NFH	201 (4)	231 (5)	195(5)
FISH SERVICES			
L SNAKE RIVER COMP PLAN	3,855 (3)	4,547 (2)	5,492(2)
DWORSHAK FISH ASSIST	122 (4)	121 (4)	123(4)
ENDANGERED SPECIES			
BOISE END SPECIES	303 (4)	140 (3)	140(3)
ECOLOGICAL SERVICES			
BOISE ECO SVCS	263 (9)	199 (7)	198(7)
WILDLIFE REFUGES			
DEER FLAT NWR	309 (6)	305 (6)	266(6)
KOOTENAI NWR	115 (2)	110 (2)	104(2)
SOUTHEAST IDAHO NWR	706 (11)	911 (11)	908(11)
WILDLIFE MANAGEMENT			
BOISE WA	782 (15)	6	6

	FY 1985 ACTUAL $(FTE)		FY 1986 ESTIMATE $(FTE)		FY 1987 ESTIMATE $(FTE)	
IDAHO						
FISH CO-OP UNITS						
UNIV OF IDAHO	156	(2)	161	(2)	104(	2)
FISHERY RESEARCH						
HAGERMAN FIELD STATION	340	(4)	326	(5)	326(	5)
STATE TOTAL	7,859(	73)	7,794(	60)	8,707(	60)
ILLINOIS						
FISH SERVICES						
CARTERVILLE FISHERY ASSIST	46	(2)	52	(2)	52(	2)
ECOLOGICAL SERVICES						
ROCK ISLAND ECO SVCS	226	(6)	220	(8)	220(	8)
MARION IL ECO SVCS	143	(3)	141	(3)	141(	3)
WILDLIFE REFUGES						
CRAB ORCHARD NWR	1,106	(40)	1,047	(40)	959(	40)
MARK TWAIN NWR	298	(8)	270	(8)	298(	8)
CHAUTAUQUA NWR	145	(2)	241	(2)	374(	2)
WILDLIFE MANAGEMENT						
SPRINGFIELD WA	105	(2)	13	(1)		
QUINCY BIOLOGIST	46	(1)	50	(1)	54(	1)
LAW ENFORCEMENT						
CHICAGO LE - SRA	62	(2)	61	(2)	62(	2)
SPRINGFIELD LE - SRA	140	(4)	129	(4)	141(	4)
STATE TOTAL	2,317(	70)	2,224(	71)	2,301(	70)
INDIANA						
ECOLOGICAL SERVICES						
BLOOMINGTON ECO SVCS	259	(6)	242	(6)	262(	6)
WILDLIFE REFUGES						
MUSCATATUCK NWR	259	(7)	224	(7)	239(	7)
WILDLIFE MANAGEMENT						
WEST LAFAYETTE WA	149	(3)	21	(1)		
STATE TOTAL	667(	16)	487(	14)	501(	13)
IOWA						
WILDLIFE REFUGES						
DESOTO NWR	806	(22)	911	(22)	717(	22)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
IOWA			
WILDLIFE REFUGES			
UNION SLOUGH	160 (4)	191 (4)	148(4)
LOUISA DIST - REF	271 (4)	272 (4)	127(4)
COOPERATIVE RESEARCH			
IOWA STATE UNIV	155 (3)	161 (3)	150(3)
STATE TOTAL	1,392(33)	1,535(33)	1,142(33)
KANSAS			
WILDLIFE REFUGES			
FLINT HILLS NWR	224 (5)	264 (6)	234(6)
KIRWIN NWR	200 (4)	229 (5)	237(5)
QUIVIRA NWR	275 (5)	295 (7)	274(7)
STATE TOTAL	699(14)	788(18)	715(18)
KENTUCKY			
FISH HATCHERIES			
FRANKFORT NFH	148 (5)	169 (5)	
WOLF CREEK NFH	168 (5)	179 (5)	191(5)
WILDLIFE MANAGEMENT			
LEXINGTON WA	47 (1)	6	20
STATE TOTAL	383(11)	354(10)	211(5)
LOUISIANA			
FISH HATCHERIES			
NATCHITOCHES NFH	219 (6)	259 (6)	
ECOLOGICAL SERVICES			
LAFAYETTE ECO SVCS	262 (8)	295 (8)	350(8)
WILDLIFE REFUGES			
CATAHOULA NWR	171 (4)	229 (4)	201(4)
D'ARBONNE NWR	219 (1)	304 (1)	311(1)
LACASSINE NWR	238 (3)	292 (3)	295(3)
BOGUE CHITTO NWR	235 (8)	218 (8)	367(8)
SABINE NWR	310 (7)	370 (7)	360(7)
TENSAS RIVER NWR	446 (4)	403 (4)	383(4)
WILDLIFE MANAGEMENT			
BATON ROUGE WA	69 (2)	20	35

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
LOUISIANA			
WILDLIFE MANAGEMENT			
CROWLEY LA WA	174 (3)		
LAW ENFORCEMENT			
SLIDELL LE-SPA	546 (11)	514 (12)	518(12)
FISH CO-OP UNITS			
LOUISIANA STATE	159 (3)	160 (3)	153(3)
COASTAL ECOSYSTEM TEAM			
NAT COASTAL ECOSYS TEAM	1,287 (20)	1,232 (29)	1,226(29)
WILDLIFE RESEARCH			
LOUISIANA STATE		43	41
STATE TOTAL	4,335(80)	4,289(85)	4,240(79)
MAINE			
FISH HATCHERIES			
CRAIG BROOK NFH	204 (5)	200 (5)	214(5)
GREEN LAKE NFH	404 (10)	425 (10)	437(10)
WILDLIFE REFUGES			
MOOSEHORN NWR	656 (8)	340 (8)	267(7)
PETITE MANAN	( )	82 (1)	131(1)
WILDLIFE MANAGEMENT			
AUGUSTA WA	72 (1)	8	
FISH CO-OP UNITS			
UNIV OF MAINE	177 (3)	221 (3)	228(3)
WILDLIFE RESEARCH			
PATUXENT-ORONO	90 (2)	119 (2)	130(2)
STATE TOTAL	1,603(29)	1,395(29)	1,407(28)
MARYLAND			
FISH SERVICES			
CHESA BAY FISH COORD	35 (1)	182 (1)	131(1)
ECOLOGICAL SERVICES			
ANNAPOLIS ECO SVCS	1,063 (20)	1,249 (28)	1,173(28)
WILDLIFE REFUGES			
BLACKWATER NWR	627 (12)	718 (12)	446(12)
EASTERN NECK NWR	229 (5)	190 (5)	164(5)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
MARYLAND			
WILDLIFE MANAGEMENT			
ANNAPOLIS WA	62 (1)	2	
LAW ENFORCEMENT			
BALTIMORE LE - SAC	170 (2)	54 (1)	54(1)
CAMBRIDGE LE - SAC	263 (4)	28 (1)	28(1)
WILDLIFE RESEARCH			
PATUXENT W/L RES CENTER	9,423 (114)	7,171 (137)	8,599(137)
STATE TOTAL	11,892(159)	9,594(185)	10,595(185)
MASSACHUSETTS			
FISH HATCHERIES			
BERKSHIRE TROUT HATCHERY	191 (2)	112 (2)	99(2)
NO ATTLEBORO NFH	237 (4)	189 (4)	196(4)
SUNDERLAND NAT SALMON ST	91 (3)	95 (3)	96(3)
FISH SERVICES			
CONN. RVR ANAD FISH PROG	50 (1)	50 (1)	50(1)
WILDLIFE REFUGES			
GREAT MEADOWS NWR	309 (6)	285 (6)	266(6)
PARKER RIVER NWR	522 (15)	637 (15)	741(15)
WILDLIFE MANAGEMENT			
HADLEY MA WA	66 (1)		
LAW ENFORCEMENT			
NEWTON CORNER LE - SAC	496 (12)	673 (10)	737(9)
NEWTON CORNER LE - SRA	257 (4)	233 (5)	235(5)
FISH CO-OP UNITS			
UNIV OF MASSACHUSETTS	160 (3)	158 (3)	151(3)
COOPERATIVE RESEARCH			
UNIV OF MASSACHUSETTS	62 (1)	60 (1)	57(1)
STATE TOTAL	2,441(52)	2,492(50)	2,618(49)
MICHIGAN			
FISH HATCHERIES			
JORDAN RIVER NFH	425 (11)	571 (11)	582(11)

	FY 1985 ACTUAL $(FTE)		FY 1986 ESTIMATE $(FTE)		FY 1987 ESTIMATE $(FTE)	
MICHIGAN						
FISH HATCHERIES						
PENDILLS CREEK NFH	371	(8)	484	(9)	563(	9)
FISH SERVICES						
ELMIRA FISH ASSIST	40	(1)	40	(1)	41(	1)
ECOLOGICAL SERVICES						
EAST LANSING ECO SVCS	285	(6)	350	(8)	367(	8)
WILDLIFE REFUGES						
SENEY NWR	416	(8)	368	(8)	270(	8)
SHIAWASSEE NWR	358	(8)	331	(8)	258(	8)
WILDLIFE MANAGEMENT						
EAST LANSING WA	123	(3)	55	(1)	132(	2)
LAW ENFORCEMENT						
ANN ARBOR LE - SRA	78	(2)	77	(2)	79(	2)
FISHERY RESEARCH						
GREAT LAKES FISHERY LAB	3,387	(80)	3,338	(82)	3,411(	82)
STATE TOTAL	5,463(	127)	5,544(	130)	5,793(	131)
MINNESOTA						
FISH SERVICES						
WINONA FISH ASSIST	55	(1)	61	(1)	62(	1)
ECOLOGICAL SERVICES						
ST PAUL ECO SVCS	307	(9)	330	(9)	330(	9)
WILDLIFE REFUGES						
AGASSIZ NWR	343	(8)	468	(8)	329(	8)
RICE LAKE NWR	145	(5)	138	(5)	147(	5)
SHERBURNE NWR	379	(7)	393	(7)	270(	7)
TAMARAC NWR	298	(7)	258	(7)	408(	7)
UPPER MISS RIVER COMPLEX	1,311	(26)	1,164	(26)	1,297(	26)
MINN WETLANDS COMPLEX	409	(7)	374	(7)	431(	7)
MORRIS WMD	470	(10)	486	(10)	419(	10)
FERGUS FALLS WMD	373	(9)	442	(9)	383(	9)
DETROIT LAKES	246	(8)	415	(8)	358(	8)
LITCHFIELD WMD	375	(7)	491	(7)	343(	7)
MINNESOTA VALLEY NWR	455	(10)	335	(10)	315(	10)
BLOOMINGTON BIO	65	(2)	85	(2)	92(	2)
BIG STONE NWR	216	(2)	153	(2)	143(	2)
WILDLIFE MANAGEMENT						
ST PAUL WA	207	(5)	38	(2)	107(	2)

	FY 1985 ACTUAL $(FTE)		FY 1986 ESTIMATE $(FTE)		FY 1987 ESTIMATE $(FTE)	
MINNESOTA						
LAW ENFORCEMENT						
MINNEAPOLIS LE - SAC	914	(17)	882	(19)	874(	19)
ST PAUL LE - SRA	136	(3)	96	(2)	97(	2)
WILDLIFE RESEARCH						
ST. PAUL	79	(1)	197	(2)	197(	2)
STATE TOTAL	6,768(	144)	6,626(	143)	6,602(	143)
MISSISSIPPI						
FISH HATCHERIES						
MERIDIAN NFH	180	(5)	163	(5)	172(	5)
PRIVATE JOHN ALLEN NFH	203	(6)	174	(5)	(	)
ENDANGERED SPECIES						
JACKSON END SPECIES	413	(9)	446	(9)	446(	9)
ECOLOGICAL SERVICES						
VICKSBURG ECO SVCS	254	(8)	280	(8)	310(	8)
WILDLIFE REFUGES						
MISS SANDHILL CRANE NWR	443	(7)	404	(7)	325(	7)
NOXUBEE NWR	448	(6)	468	(6)	349(	6)
YAZOO NWR	481	(5)	559	(5)	462(	5)
JACKSON BIOLOGIST	55	(1)	60	(1)	73(	1)
WILDLIFE MANAGEMENT						
MISSISSIPPI STATE WA	100	(1)	22	(1)	47(	1)
RESEARCH CO-OP UNITS						
MISSISSIPPI STATE UNIV	130	(2)	125	(2)	120(	3)
WILDLIFE RESEARCH						
PATUXENT-VICKSBURG	100	(2)	131	(2)	450(	2)
STATE TOTAL	2,807(	52)	2,832(	51)	2,754(	47)
MISSOURI						
FISH HATCHERIES						
NEOSHO NFH	259	(4)	185	(4)	146(	4)
ECOLOGICAL SERVICES						
COLUMBIA ECO SVCS	216	(4)	230	(3)	230(	3)
WILDLIFE REFUGES						
MINGO NWR	349	(10)	349	(10)	334(	10)
SQUAW CREEK	212	(4)	202	(4)	321(	4)

	FY 1985 ACTUAL $(FTE)		FY 1986 ESTIMATE $(FTE)		FY 1987 ESTIMATE $(FTE)	
MISSOURI						
WILDLIFE REFUGES						
SWAN LAKE NWR	295	(7)	251	(7)	245(	7)
CLARENCE CANNON NWR	165	(3)	472	(3)	163(	3)
WILDLIFE MANAGEMENT						
KANSAS CITY WA	64	(1)	14	(1)		
LAW ENFORCEMENT						
JEFFERSON CITY LE - SRA	156	(4)	154	(4)	159(	4)
CO-OP UNITS						
UNIV OF MISSOURI	155	(2)	138	(1)	100(	2)
FISHERY RESEARCH						
COLUMBIA NAT FISH RESLAB	3,468	(83)	3,286	(83)	3,686(	83)
STATE TOTAL	5,379(	122)	5,281(	120)	5,384(	120)
MONTANA						
FISH HATCHERIES						
BOZEMAN FISH TECH CENTER	207	(5)	206	(4)	207(	8)
CRESTON NFH	225	(4)	217	(6)	202(	6)
ENNIS NFH	254	(6)	275	(5)	227(	5)
ENDANGERED SPECIES						
HELENA END SPECIES	263	(5)	270	(5)	278(	5)
GRIZZLY BEAR COORD MISSOUL	71	(1)	226	(2)	226(	2)
ECOLOGICAL SERVICES						
BILLINGS ECO SVCS	425	(9)	402	(8)	420(	8)
WILDLIFE REFUGES						
BENTON LAKE NWR	326	(3)	342	(5)	343(	5)
CHARLES M RUSSELL NWR	960	(12)	992	(18)	928(	18)
MEDICINE LAKE NWR	360	(5)	422	(5)	416(	5)
NATIONAL BISON RANGE NWR	427	(5)	518	(8)	487(	8)
LEE METCALF NWR	135	(2)	151	(2)	141(	2)
RED ROCK LAKES NWR	200	(3)	261	(4)	247(	4)
BOWDOIN NWR	242	(3)	209	(4)	215(	4)
WILDLIFE MANAGEMENT						
BILLINGS WA	704	(21)				
LAW ENFORCEMENT						
BILLINGS LE - SRA	45	(1)	42	(1)	43(	1)
COOPERATIVE RESEARCH						
UNIV OF MONTANA	242	(3)	201	(3)	198(	3)
STATE TOTAL	5,086(	98)	4,734(	80)	4,578(	84)

	FY 1985 ACTUAL [illegible]	FY 1986 ESTIMATE [illegible]	FY 1987 ESTIMATE [illegible]
NEBRASKA			
FISH SERVICES			
VALENTINE FISH ASSIST	[illegible]	[illegible]	[illegible]
ENDANGERED SPECIES			
GR ISLAND END SPECIES	[illegible]	[illegible]	[illegible]
ECOLOGICAL SERVICES			
GRAND ISLAND ECO SVCS	[illegible]	[illegible]	[illegible]
WILDLIFE REFUGES			
CRESCENT LAKE NWR	[illegible]	[illegible]	[illegible]
FORT NIOBRARA NWR	[illegible]	[illegible]	[illegible]
HASTINGS WMD	[illegible]	[illegible]	[illegible]
WILDLIFE MANAGEMENT			
LINCOLN WA	[illegible]		
STATE TOTAL	[illegible]	[illegible]	[illegible]
NEVADA			
FISH HATCHERIES			
LAHONTAN NFH	[illegible]	[illegible]	[illegible]
ENDANGERED SPECIES			
RENO END SPECIES	[illegible]	[illegible]	[illegible]
WILDLIFE REFUGES			
DESERT NWR	[illegible]	[illegible]	[illegible]
MOAPA VALLEY NWR			[illegible]
ASH MEADOWS NWR			[illegible]
RUBY LAKE NWR	[illegible]	[illegible]	[illegible]
STILLWATER NWR	[illegible]	[illegible]	[illegible]
WILDLIFE MANAGEMENT			
RENO WA	[illegible]	[illegible]	[illegible]
LAW ENFORCEMENT			
RENO LE - SRA	[illegible]	[illegible]	[illegible]
STATE TOTAL	[illegible]	[illegible]	[illegible]
NEW HAMPSHIRE			
FISH HATCHERIES			
NASHUA NFH	[illegible]	[illegible]	[illegible]
FISH SERVICES			
LACONIA FISH ASSIST	[illegible]	[illegible]	[illegible]
ANADROMOUS FISH PLAN.	[illegible]	[illegible]	[illegible]

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
NEW HAMPSHIRE			
ECOLOGICAL SERVICES			
CONCORD ECO SVCS	425 (9)	479 (10)	479(10)
WILDLIFE MANAGEMENT			
CONCORD NH WA	77 (1)	6	
LAW ENFORCEMENT			
CONCORD LE - SRA	191 (2)	212 (4)	234(4)
STATE TOTAL	1,195(21)	1,163(23)	1,131(23)
NEW JERSEY			
FISH SERVICES			
DELA RIV ANADR FISH PROG	51 (1)	48 (1)	48(1)
WILDLIFE REFUGES			
EDW B FORSYTHE NWR	452 (12)	574 (12)	599(12)
GREAT SWAMP NWR	372 (9)	431 (9)	399(9)
WILDLIFE MANAGEMENT			
TRENTON WA	110 (1)	2	
LAW ENFORCEMENT			
NEWARK LE - SRA	204 (5)	321 (6)	333(6)
STATE TOTAL	1,259(28)	1,356(28)	1,349(28)
NEW MEXICO			
FISH HATCHERIES			
DEXTER NFH	322 (7)	325 (7)	293(7)
ECOLOGICAL SERVICES			
ALBUQUERQUE ECO SVCS	225 (7)	227 (7)	253(7)
WILDLIFE REFUGES			
BITTER LAKE NWR	213 (4)	221 (5)	183(5)
BOSQUE DEL APACHE NWR	845 (16)	769 (18)	793(18)
LAS VEGAS NWR	195 (4)	188 (4)	178(4)
MAXWELL NWR	115 (2)	150 (3)	158(3)
WILDLIFE MANAGEMENT			
ALBUQUERQUE WA	975 (25)		
LAW ENFORCEMENT			
ALBUQUERQUE LE - SAC	261 (8)	286 (10)	308(10)
WILDLIFE RESEARCH			
DWRC-ALBUQUERQUE	108 (5)	115 (5)	115(5)
STATE TOTAL	3,267(78)	2,251(59)	2,273(59)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
NEW YORK			
ECOLOGICAL SERVICES			
CORTLAND ECO SVCS	406 (9)	422 (11)	419(11)
WILDLIFE REFUGES			
IROQUOIS NWR	320 (8)	371 (8)	385(8)
MONTEZUMA NWR	527 (10)	387 (9)	393(9)
WERTHEIM NY NWR	249 (5)	350 (7)	270(7)
WILDLIFE MANAGEMENT			
ALBANY WA	68 (1)	3	
LAW ENFORCEMENT			
LAWRENCE NY LE - SRA	605 (16)	537 (17)	539(17)
ALBANY LE - SRA	188 (2)	169 (3)	171(3)
FISHERY RESEARCH			
TUNISON LAB	413 (10)	392 (10)	383(10)
COOPERATIVE RESEARCH			
CORNELL UNIV	160 (3)	157 (3)	149(3)
STATE TOTAL	2,936(64)	2,788(68)	2,709(68)
NORTH CAROLINA			
FISH HATCHERIES			
EDENTON NFH	162 (5)	147 (5)	166(5)
MCKINNEY LAKE NFH	135 (3)	181 (3)	147(3)
PISGAH FOREST BIOLOGIST	56 (1)	50 (1)	54(1)
ENDANGERED SPECIES			
ASHEVILLE END SPECIES	338 (10)	359 (10)	359(10)
ECOLOGICAL SERVICES			
RALEIGH ECO SVCS	221 (6)	221 (7)	230(7)
WILDLIFE REFUGES			
ALLIGATOR RIVER	362 (9)	128 (9)	369(9)
MATTAMUSKEET NWR	948 (6)	717 (6)	689(6)
PEE DEE NWR	264 (5)	232 (5)	193(5)
WASHINGTON BIOLOGIST	55 (1)	62 (1)	75(1)
WASHINGTON FORESTER	44 (1)		
WILDLIFE MANAGEMENT			
RALEIGH WA	67 (1)	8	20

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
NORTH CAROLINA			
LAW ENFORCEMENT			
RALEIGH LE - SRA	345 (7)	332 (7)	336(7)
FISH CO-OP UNITS			
N CAROLINA STATE	109 (2)	105 (2)	100(2)
STATE TOTAL	3,106(57)	2,542(56)	2,738(56)
NORTH DAKOTA			
FISH HATCHERIES			
GARRISON NFH	227 (4)	247 (4)	248(4)
VALLEY CITY NFH	237 (5)	214 (5)	233(5)
ECOLOGICAL SERVICES			
BISMARCK ECO SVCS	268 (8)	248 (7)	288(7)
WILDLIFE REFUGES			
BISMARCK WMA	63 (1)	48 (1)	45(1)
ARROWWOOD NWR	625 (11)	692 (16)	663(15)
AUDUBON NWR	296 (4)	313 (7)	322(7)
DES LACS NWR	608 (10)	524 (13)	504(13)
DEVILS LAKE WMD	348 (7)	377 (9)	374(9)
J CLARK SALYER NWR	445 (6)	498 (7)	480(7)
KULM NWR	295 (4)	220 (6)	229(6)
TEWAUKON NWR	239 (2)	225 (4)	230(4)
UPPER SOURIS NWR	237 (4)	271 (5)	254(5)
DEVILS LAKE WMD	8	8	8
WILDLIFE MANAGEMENT			
BISMARCK WA	291 (4)		
LAW ENFORCEMENT			
BISMARK LE - SRA	147 (3)	142 (3)	144(3)
WILDLIFE RESEARCH			
NO PRAIRIE W/L RES CNTR	1,474 (43)	1,536 (46)	2,757(46)
STATE TOTAL	5,822(116)	5,550(133)	6,779(132)
OHIO			
FISH HATCHERIES			
SENECAVILLE NFH	209 (3)	199 (5)	156(5)
ECOLOGICAL SERVICES			
COLUMBUS ECO SVCS	175 (4)	208 (4)	208(4)
WILDLIFE REFUGES			
OTTAWA NWR	397 (8)	339 (8)	249(8)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
OHIO			
WILDLIFE MANAGEMENT			
COLUMBUS WA	139 (3)	29 (1)	
LAW ENFORCEMENT			
COLUMBUS LE - SRA	78 (2)	77 (2)	79(2)
COOPERATIVE RESEARCH			
OHIO STATE	202 (3)	197 (3)	191(3)
STATE TOTAL	1,200(23)	1,[illegible]49(23)	883(22)
OKLAHOMA			
FISH HATCHERIES			
TISHOMINGO NFH	286 (6)	286 (6)	291(6)
ECOLOGICAL SERVICES			
TULSA ECO SVCS	309 (8)	287 (8)	316(8)
WILDLIFE REFUGES			
SALT PLAINS NWR	261 (8)	348 (8)	316(8)
SEQUOYAH NWR	266 (6)	306 (8)	275(8)
TISHOMINGO NWR	361 (9)	370 (8)	346(8)
WASHITA NWR	230 (7)	271 (8)	245(8)
WICHITA MOUNTAINS NWR	961 (26)	978 (26)	846(26)
WILDLIFE MANAGEMENT			
OKLAHOMA CITY WA	609 (10)		
LAW ENFORCEMENT			
OKLAHOMA CITY LE - SPA	146 (3)	153 (1)	154(1)
FISH CO-OP UNITS			
OKLAHOMA STATE UNIV	79 (1)	127 (3)	121(3)
STATE TOTAL	3,546(84)	3,126(76)	2,910(76)
OREGON			
FISH HATCHERIES			
EAGLE CREEK NFH	11	39	12
WARM SPRINGS NFH	325 (5)	387 (6)	397(6)
ECOLOGICAL SERVICES			
PORTLAND ECO SVCS	322 (8)	326 (9)	325(9)
WILDLIFE REFUGES			
BEAR VALLEY			17
MALHEUR NWR	712 (12)	616 (12)	635(12)
UMATILLA NWR	487 (10)	463 (10)	432(10)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
OREGON			
WILDLIFE REFUGES			
WILLIAM F. FINLEY NWR	460 (8)	441 (8)	405(8)
SHELDON-HART MTN NWR	497 (14)	397 (10)	366(10)
WILDLIFE MANAGEMENT			
PORTLAND WA	801 (16)		
LAW ENFORCEMENT			
PORTLAND LE - SAC	1,762 (39)	1,559 (36)	1,619(36)
SALEM LE - SRA	112 (2)	172 (3)	175(3)
COOPERATIVE RESEARCH			
OREGON STATE UNIV	244 (3)	224 (3)	215(3)
STATE TOTAL	5,753(117)	4,644(97)	4,598(97)
PENNSYLVANIA			
FISH HATCHERIES			
ALLEGHENY NFH	404 (8)	419 (8)	498(8)
LAMAR FISHERY TECH CTR	219 (6)	247 (6)	255(6)
LAMAR NFH	88 (2)	96 (2)	98(2)
SUSQUEH R COORD HARRISBURG	51 (1)	51 (1)	51(1)
LAMAR FISH HEALTH UNIT	152 (5)	149 (5)	152(5)
FISH SERVICES			
WARREN FISH ASSIST	20 (1)	10 (1)	11(1)
ECOLOGICAL SERVICES			
STATE COLLEGE ECO SVCS	535 (12)	532 (16)	532(16)
WILDLIFE REFUGES			
ERIE NWR	229 (6)	299 (6)	225(6)
TINICUM MARSH ENV CENTER	306 (9)	316 (8)	263(8)
WILDLIFE MANAGEMENT			
STATE COLLEGE WA	54 (1)	2	
LAW ENFORCEMENT			
HARRISBURG LE - SRA	168 (2)	200 (4)	202(4)
FISHERY RESEARCH			
NE RES DEL LAB	919 (15)	915 (18)	841(18)
FISH & WILDLIFE RESEARCH			
PENN STATE UNIV	152 (3)	157 (3)	150(3)
STATE TOTAL	3,297(71)	3,393(78)	3,278(78)
RHODE ISLAND			
WILDLIFE REFUGES			
NINIGRET NWR	285 (6)	284 (6)	214(6)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
STATE TOTAL	265(6)	284(6)	214(6)
SOUTH CAROLINA			
FISH HATCHERIES			
ORANGEBURG NFH	349 (7)	318 (9)	248(9)
WALHALLA NFH	163 (4)	169 (4)	200(4)
ECOLOGICAL SERVICES			
CHARLESTON ECO SVCS	226 (8)	225 (7)	213(7)
WILDLIFE REFUGES			
CAPE ROMAIN NWR	239 (4)	261 (4)	286(4)
CAROLINA SANDHILLS NWR	254 (4)	319 (4)	255(4)
SANTEE NWR	266 (5)	243 (5)	277(5)
WILDLIFE MANAGEMENT			
COLUMBIA WA	58 (1)	9	25
STATE TOTAL	1,569(33)	1,544(33)	1,504(33)
SOUTH DAKOTA			
FISH HATCHERIES			
GAVINS POINT NFH	282 (6)	293 (6)	249(6)
ECOLOGICAL SERVICES			
PIERRE ECO SVCS	192 (8)	162 (7)	191(7)
WILDLIFE REFUGES			
LACREEK NWR	313 (5)	328 (6)	339(6)
LAKE ANDES NWR	374 (5)	340 (5)	362(5)
MADISON WMD	244 (3)	276 (5)	306(5)
SAND LAKE NWR	435 (7)	452 (9)	488(9)
WAUBAY NWR	16 (1)	16 (1)	39(1)
WAUBAY WMD	282 (4)	282 (5)	294(5)
WILDLIFE MANAGEMENT			
PIERRE WA	352 (1)		
BROOKINGS BIOLOGIST	47 (1)	49 (1)	49(1)
LAW ENFORCEMENT			
PIERRE LE - SRA	290 (5)	189 (5)	191(5)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
SOUTH DAKOTA			
FISH CO-OP UNITS			
SO DAKOTA STATE UNIV	96 (1)	95 (2)	95(2)
STATE TOTAL	2,931(47)	2,482(52)	2,573(52)
TENNESSEE			
FISH HATCHERIES			
DALE HOLLOW NFH	245 (6)	272 (6)	270(6)
ERWIN NFH	189 (5)	169 (5)	189(5)
ECOLOGICAL SERVICES			
COOKVILLE ECO SVCS	190 (7)	160 (7)	170(7)
WILDLIFE REFUGES			
MIGR BIRD COORD TENN	78 (1)	67 (1)	81(1)
CROSS CREEK	274 (7)	242 (7)	265(7)
HATCHIE NWR	244 (4)	244 (4)	277(4)
BROWNSVILLE FORESTER	47 (1)	42 (1)	51(1)
REELFOOT NWR	335 (6)	417 (6)	306(6)
TENNESSEE NWR	587 (8)	603 (8)	576(8)
WILDLIFE MANAGEMENT			
NASHVILLE WA	91 (1)	18 (1)	47(1)
BROWNSVILLE WA	64 (1)	6	20
LAW ENFORCEMENT			
LE, NASHVILLE TN	334 (7)	306 (7)	309(7)
FISH CO-OP UNITS			
TENN TECH UNIV	77 (1)	95 (2)	91(2)
STATE TOTAL	2,755(55)	2,641(55)	2,652(55)
TEXAS			
FISH HATCHERIES			
INKS DAM NFH	294 (7)	270 (7)	245(7)
SAN MARCOS FCDC	371 (6)	346 (8)	351(8)
UVALDE NFH	278 (3)	232 (5)	318(5)
ECOLOGICAL SERVICES			
CORPUS CHRISTI ECO SVCS	334 (11)	355 (11)	377(11)
FORT WORTH ECO SVCS	303 (8)	303 (7)	323(7)
HOUSTON ECO SVCS	339 (11)	386 (12)	393(12)
WILDLIFE REFUGES			
ANAHUAC NWR	620 (14)	697 (14)	606(14)
ARANSAS NWR	423 (11)	468 (12)	386(12)
BRAZORIA NWR	435 (10)	390 (11)	483(11)

	FY 1985 ACTUAL $(FTE)		FY 1986 ESTIMATE $(FTE)		FY 1987 ESTIMATE $(FTE)	
TEXAS						
WILDLIFE REFUGES						
BIG BOGGY	58	(1)	30	(1)	137(	1)
LAGUNA ATASCOSA NWR	384	(10)	375	(10)	334(	10)
SANTA ANA	494	(10)	613	(9)	535(	9)
O GRANDE	173	(4)	148	(4)	218(	4)
ATTWATER PR CHICK NWR	260	(6)	256	(6)	228(	6)
HAGERMAN NWR	256	(7)	299	(7)	263(	7)
MULESHOE NWR	336	(7)	383	(7)	365(	7)
WILDLIFE MANAGEMENT						
SAN ANTONIO WA	1,721	(34)				
LAW ENFORCEMENT						
CORPUS CHRISTI LE - SRA	256	(4)	264	(4)	266(	4)
FORT WORTH LE - SRA	244	(5)	253	(3)	254(	3)
HOUSTON LE - SRA	184	(4)	187	(4)	188(	4)
STATE TOTAL	7,783(	173)	6,245(	142)	6,270(	142)
UTAH						
FISH HATCHERIES						
JONES HOLE NFH	349	(5)	340	(6)	306(	6)
FISH SERVICES						
COLO. RIV FISH INV - SLC	40	(1)	30	(1)	30(	1)
ENDANGERED SPECIES						
SALT LAKE CITY END SPECIES	306	(8)	344	(8)	355(	8)
ECOLOGICAL SERVICES						
SALT LAKE CITY ECO SVCS	503	(12)	475	(11)	507(	11)
WILDLIFE REFUGES						
BEAR RIVER MB REF	112	(3)	106	(3)	100(	3)
FISH SPRINGS NWR	172	(3)	180	(3)	169(	3)
OURAY NWR	219	(3)	251	(5)	233(	5)
WILDLIFE MANAGEMENT						
SALT LAKE CITY WA	779	(4)				
CO-OP UNITS						
UTAH STATE UNIV	74	(1)	109	(1)	90(	2)
STATE TOTAL	2,554(	40)	1,835(	38)	1,790(	39)
VERMONT						
FISH HATCHERIES						
PITTSFORD NFH	134	(4)	142	(4)	138(	4)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
VERMONT			
FISH HATCHERIES			
WHITE RIVER NFH	393 (11)	427 (11)	428(11)
FISH SERVICES			
MONTPELIER FISH ASST	98 (3)	98 (3)	97(3)
WILDLIFE REFUGES			
MISSISQUOI NWR	147 (4)	157 (4)	125(4)
STATE TOTAL	772(22)	824(22)	788(22)
VIRGINIA			
FISH HATCHERIES			
HARRISON LAKE NFH	181 (5)	181 (5)	160(5)
FISH SERVICES			
YORKTOWN FISH ASSIST	52 (1)	49 (1)	51(1)
WILDLIFE REFUGES			
BACK BAY NWR	402 (10)	488 (10)	408(10)
MACKAY ISLAND	148 (4)	216 (5)	234(5)
CHINCOTEAGUE NWR	523 (17)	533 (18)	533(18)
DISMAL SWAMP NWR	398 (10)	365 (10)	334(10)
MASON NECK NWR	226 (4)	174 (4)	163(4)
PRESQUILE NWR	109 (3)	134 (3)	119(3)
EASTRN SHORE OF VA NWR	358 (7)	396 (10)	428(10)
WILDLIFE MANAGEMENT			
STAUNTON WA	67 (1)	3	
LAW ENFORCEMENT			
RICHMOND LE - SRA	196 (8)	334 (12)	336(12)
COOPERATIVE RESEARCH			
VIRGINIA TECH	115 (2)	110 (2)	101(2)
STATE TOTAL	2,775(72)	2,983(80)	2,867(80)
WASHINGTON			
FISH HATCHERIES			
ABERNATHY SALMON CDC	128 (3)	231 (3)	221(3)
CARSON NFH	22	1	1
ENTIAT NFH	145 (3)	174 (3)	213(3)
LEAVENWORTH NFH	432 (9)	414 (9)	464(9)
LITTLE WHITE SALMON NFH	9 (1)	50	20
LWR COL R FISH HEALTH CT	129 (4)	118 (5)	102(5)
MAKAH NFH	280 (5)	260 (6)	453(6)
QUILCENE NFH	230 (2)	195 (4)	261(4)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
WASHINGTON			
FISH HATCHERIES			
SPRING CREEK NFH	11	1	76
WINTHROP NFH	176 (4)	440 (4)	150(4)
YAKIMA FISH SCREENS	104 (3)	108 (3)	99(3)
OLYMPIA FISH HEALTH CTR	88 (2)	97 (3)	100(3)
FISH SERVICES			
VANCOUVER FISH ASSIST	224 (6)	272 (8)	272(8)
COL RIV COORD VANC	118 (2)	118 (1)	123(1)
OLYMPIA FISH ASSIST	353 (8)	429 (8)	432(8)
LEAVENWORTH FISH ASSIST	53 (1)	95 (1)	96(1)
ENDANGERED SPECIES			
OLYMPIA END SPECIES	124 (3)	92 (2)	92(2)
ECOLOGICAL SERVICES			
OLUMPIA ECO SVCS	345 (10)	352 (10)	352(10)
WILDLIFE REFUGES			
COLUMBIA NWR	384 (8)	336 (8)	297(8)
NISQUALLY NWR	437 (9)	369 (8)	352(8)
LWR COLUMB RIV REF COMPLEX	920 (17)	864 (17)	769(17)
TURNBULL NWR	304 (5)	253 (3)	256(3)
LITTLE PEND OREILLE NWR	67 (1)	62 (1)	62(1)
WILDLIFE MANAGEMENT			
UNION GAP WA	356 (1)		
LAW ENFORCEMENT			
SEATTLE LE - SRA	168 (3)	172 (3)	175(3)
FISH CO-OP UNITS			
UNIV OF WASH	49 (1)	55 (1)	53(1)
FISHERY RESEARCH			
NATL FISH RES LAB	1,238 (26)	960 (26)	945(26)
STATE TOTAL	6,894(137)	6,518(137)	6,436(137)
WEST VIRGINIA			
FISH HATCHERIES			
BOWDEN NFH	254 (6)	317 (6)	248(6)
WHITE SULPHUR SPR	214 (5)	221 (5)	243(5)
WILDLIFE MANAGEMENT			
ELKINS WV WA	72 (1)	12	
FISHERY RESEARCH			
NATIONAL FISH CENTER WV	2,259 (46)	2,213 (47)	2,030(47)

	FY 1985 ACTUAL $(FTE)	FY 1986 ESTIMATE $(FTE)	FY 1987 ESTIMATE $(FTE)
WEST VIRGINIA			
EASTERN ENG LAND USE TEAM			
EASTERN ENERGY USE TEAM	775 (3)	646 (7)	953(7)
STATE TOTAL	3,569(61)	3,409(65)	3,471(65)
WISCONSIN			
FISH HATCHERIES			
FISH DISEASE CONTROL CNTR	144 (4)	144 (4)	148(4)
GENOA NFH	178 (4)	238 (5)	172(5)
IRON RIVER NFH	572 (8)	529 (8)	422(8)
FISH SERVICES			
IRON RIVER FISH ASST	48 (1)	36 (2)	37(2)
ECOLOGICAL SERVICES			
GREEN BAY ECO SVCS	228 (4)	236 (4)	246(4)
WILDLIFE REFUGES			
HORICON NWR	375 (7)	373 (7)	274(7)
NECEDAH NWR	376 (7)	266 (7)	294(7)
WILDLIFE MANAGEMENT			
MADISON WA	54 (2)	32 (1)	110(1)
LAW ENFORCEMENT			
MADISON LE - SRA	109 (3)	108 (3)	111(3)
FISH CO-OP UNITS			
UNIV OF WISC	56 (1)	58 (1)	56(1)
FISHERY RESEARCH			
FISH CONTROL LAB	1,144 (16)	1,145 (23)	1,144(23)
COOPERATIVE RESEARCH			
UNIV OF WISC	136 (1)	59 (1)	56(1)
WILDLIFE RESEARCH			
NATL F/W HEALTH LAB	1,636 (48)	2,263 (43)	2,285(43)
NO PRAIRIE-LA CROSSE	100 (3)	100 (3)	100(3)
STATE TOTAL	5,156(109)	5,587(112)	5,455(112)
WYOMING			
FISH HATCHERIES			
JACKSON NFH	284 (3)	224 (4)	244(4)
SARATOGA NFH	141 (2)	142 (3)	157(3)
BEULAH FISH TECH CENTER	177 (5)	167 (4)	171(4)

	FY 1985 ACTUAL $(FTE)		FY 1986 ESTIMATE $(FTE)		FY 1987 ESTIMATE $(FTE)	
WYOMING						
FISH SERVICES						
LANDER FISH ASSIST	1		5		5	
MAMMOUTH FISH ASSIST	104	(3)	103	(4)	103(	4)
WILDLIFE REFUGES						
NATIONAL ELK REFUGE NWR	571	(7)	634	(11)	590(	11)
SEEDSKADEE NWR	183	(3)	206	(4)	188(	4)
WILDLIFE MANAGEMENT						
CASPER WA	779	(6)				
FISH & WILDLIFE RESEARCH						
UNIV OF WYOMING	181	(3)	168	(3)	157(	3)
STATE TOTAL	2,421(	32)	1,649(	33)	1,615(	33)
PUERTO RICO						
ENDANGERED SPECIES						
PUERTO RICO FLD STA	188	(3)	177	(3)	177(	3)
ECOLOGICAL SERVICES						
PUERTO RICO FLD STA	180	(4)	111	(4)	111(	4)
WILDLIFE REFUGES						
CARIBBEAN ISL NWR	468	(3)	602	(3)	439(	3)
LAW ENFORCEMENT						
MAYAGUEZ LE - SRA	70	(1)	80	(1)	82(	1)
WILDLIFE RESEARCH						
PUERTO RICO WLRES			191	(5)	191(	5)
STATE TOTAL	906(	11)	1,161(	16)	1,000(	16)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUDGET JUSTIFICATIONS, F. Y. 1987

NOTICE: These budget justifications are prepared for the Interior and Related Agencies Appropriations Subcommittees. Approval for release of the justifications prior to their printing in the public record of the Subcommittee hearings may be obtained from the Subcommittees through the Office of Budget of the Department of the Interior.

NATIONAL PARK SERVICE

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FISCAL 1987 BUDGET JUSTIFICATIONS

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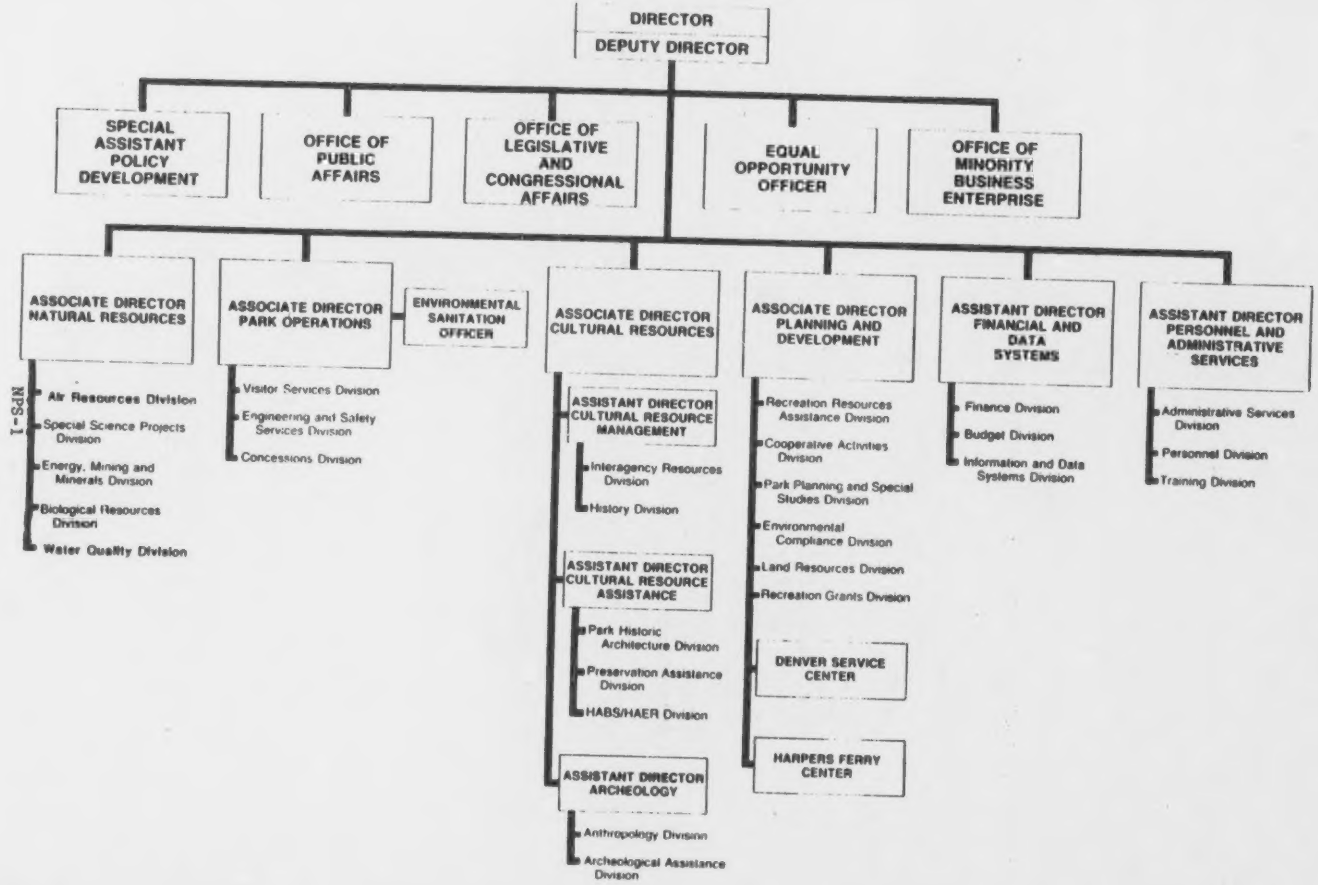
NATIONAL PARK SERVICE


DIRECTOR
DEPUTY DIRECTOR
SPECIAL ASSISTANT POLICY DEVELOPMENT
OFFICE OF PUBLIC AFFAIRS
OFFICE OF LEGISLATIVE AND CONGRESSIONAL AFFAIRS
EQUAL OPPORTUNITY OFFICER
OFFICE OF MINORITY BUSINESS ENTERPRISE
ASSOCIATE DIRECTOR NATURAL RESOURCES
Air Resources Division
Special Science Projects Division
Energy, Mining and Minerals Division
Biological Resources Division
Water Quality Division
ASSOCIATE DIRECTOR PARK OPERATIONS
ENVIRONMENTAL SANITATION OFFICER
Visitor Services Division
Engineering and Safety Services Division
Concessions Division
ASSOCIATE DIRECTOR CULTURAL RESOURCES
ASSISTANT DIRECTOR CULTURAL RESOURCE MANAGEMENT
Interagency Resources Division
History Division
ASSISTANT DIRECTOR CULTURAL RESOURCE ASSISTANCE
Park Historic Architecture Division
Preservation Assistance Division
HABS/HAER Division
ASSISTANT DIRECTOR ARCHEOLOGY
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Archeological Assistance Division
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Recreation Resources Assistance Division
Cooperative Activities Division
Park Planning and Special Studies Division
Environmental Compliance Division
Land Resources Division
Recreation Grants Division
DENVER SERVICE CENTER
HARPERS FERRY CENTER
ASSISTANT DIRECTOR FINANCIAL AND DATA SYSTEMS
Finance Division
Budget Division
Information and Data Systems Division
ASSISTANT DIRECTOR PERSONNEL AND ADMINISTRATIVE SERVICES
Administrative Services Division
Personnel Division
Training Division
NPS-1

General Statement

The National Park System is more than 100-years-old and has grown immensely in size and complexity since the first parks were established. At that time, bison, moose, and elk still inhabited the plains, and grizzly bears were common in the Rockies and elsewhere. Cattle drives still moved north from Texas to Kansas, and the frontier had not closed. But since then, the world has witnessed a staggering level and pace of change. This change is mirrored in the Park System which is now comprised of 337 areas in 49 States and the District of Columbia. Parks range in size and character from the immense roadless wilderness of Gates of the Arctic National Park in Alaska to Federal Hall National Memorial in lower Manhattan. The Service is responsible for 74.8 million acres with projected visitation to exceed 354 million in 1986.

The nature of the National Park Service's mission makes management of these areas challenging. Congress established the National Park Service as a bureau in the Department of the Interior in 1916 (16 U.S.C. 1) stating in the authorizing legislation that:

> "The Service thus established shall promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified by such means and measures as conform to the fundamental purpose of the said parks, monuments, and reservations which purpose is to conserve the scenery and the nature and historic objects and the wildlife therein and to provide the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

A mission promoting both preservation and use in today's complex park system requires a delicate balancing act and ensures that today's park managers will face issues uncontemplated a century ago. A large park, such as Yellowstone or Yosemite, is as demanding to operate as a small city. Many activities are comparable, including road maintenance, operation of sewage and drinking water systems, law enforcement, traffic control, and emergency preparedness. Daily visitation at Yellowstone National Park, for example, may reach 35,000 during peak summer months, placing considerable pressure on park facilities and staff to maintain basic services. Consequently, the Service must operate an active resource management program to preserve and protect its irreplaceable resources and also conduct an active visitor services program to foster appreciation for and understanding of these priceless resources by the American public.

The National Park System is comprised of an extraordinary array of natural, cultural, and recreational resources. Many of these parks differ quite drastically from what the creators of the first parks envisioned. From the vantage point of more than a century, we see values preserved that are rarer and more precious than our predecessors could have imagined. In the units of the National Park System, we see a good idea that has become better and has been adopted widely by other nations. Parks contribute immeasurably to the quality of our lives and will be even more meaningful to future generations than they are to us.

General Statement

Director William Penn Mott has challenged the National Park Service to rededicate itself to its mission and thereby strengthen public trust, revitalize the organization and ensure its continued success. Together with the Regional Directors and other top managers, he has formulated a 12-Point Plan to give new vision to the future. The Service's fiscal 1987 budget reflects the new vision as limited resources are increasingly shifted to implement this plan.

The major points in this plan are as follows:

1. Develop a long-range strategy to protect our natural, cultural, and recreational resources.
2. Pursue a creative, expanded land protection initiative.
3. Stimulate and increase our interpretive and visitor service activities for greater public impact.
4. Share effectively with the public our understanding of critical resource issues.
5. Increase public understanding of the role and function of the National Park Service.
6. Expand the role and involvement of citizens and citizen groups at all levels in the National Park Service.
7. Seek a better balance between visitor use and resource management.
8. Enhance our ability to meet the diverse uses that the public expects in national parks.
9. Expand career opportunities for our employees.
10. Plan, design, and maintain appropriate park facilities.
11. Develop a team relationship between concessioners and the National Park Service.
12. Foster and encourage more creativity, efficiency, and effectiveness in the management and administration of the National Park Service.

This management plan requires most of all innovative leadership and the inspiration of the Service's competent, dedicated employees. It does not require immense new resources, but a more creative use of existing resources. That is the thrust of the budget presented in this document.

The National Park Service budget request for fiscal 1987 is $734 million, a decrease of $165.9 million from the fiscal 1986 appropriation. Selected increases, decreases, and transfers are proposed to address the Director's 12-Point Plan and reflect the Administration's priorities in its efforts to reduce the Federal budget deficit. To help accomplish both of these purposes, the Administration is proposing legislation to remove the present freeze on entrance fees for units of the Park System and create a new account for

General Statement

recreation fee revenues. Several programs from the "Operation of the National Park System" (ONPS) appropriation are proposed for transfer to this new appropriation. Significant reductions are proposed for the "Historic Preservation Fund," "Construction", and "Land Acquisition" appropriations which have a much lower priority than maintaining park operations.

The table below compares the fiscal 1986 estimate to the fiscal 1987 request:

(Dollar Amounts in Thousands)

Appropriations Requested		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Estimate	Inc.(+) or Dec. (-) from Enacted
Operation of the National Park System	($)	623,996	597,164	596,482	-27,514
(Full Time Equivalents-Total)		(14,649)	(14,649)	(14,306)	(-343)
Reimbursable Activities	(FTE-T)	(31)	(31)	(40)	(+9)
National Recreation and Preservation	($)	11,029	10,555	9,547	-1,482
	(FTE-T)	(283)	(283)	(232)	(-51)
Construction	($)	113,436	108,558	29,114	-84,322
	(FTE-T)	(603)	(603)	(461)	(-142)
Allocation to Corps of Engineers	(FTE-T)	(7)	(7)	(7)	(--)
Allocation to Federal Highway Administration	(FTE-T)	(26)	(26)	(--)	(-26)
Reimbursable Activities	(FTE-T)	(205)	(205)	(205)	(--)
John F. Kennedy Center for the Performing Arts	($)	4,771	4,566	4,771	--
	(FTE-T)	(78)	(78)	(78)	(--)
Land Acquisition	($)	97,810	93,604	15,270	-82,540
	(FTE-T)	(207)	(207)	(197)	(-10)
Allocation to Corps of Engineers	(FTE-T)	(4)	(4)	(4)	(--)
Historic Preservation Fund	($)	24,795	23,729	--	-24,795
	(FTE-T)	(--)	(--)	(--)	(--)
Illinois and Michigan Canal National Historic Corridor Commission	($)	248	237	--	-248
	(FTE-T)	(--)	(--)	(--)	(--)
Jefferson National Expansion Memorial Commission	($)	75	72	--	-75
	(FTE-T)	(--)	(--)	(--)	(--)

General Statement					
Visitor Facilities Fund	($)	[8,500][1]	--	[8,500]	--
Total Appropriations	($)	876,160	838,485	655,184	-220,976
	(FTE-T)	(16,093)	(16,093)	(15,530)	(-563)
Proposed Legislation					
Operation of the National Park System-Fee Programs	($)	--	--	59,000	+59,000
	(FTE/T)	(--)	(--)	(528)	(+528)
Permanent and Trust Funds					
Operation and Maintenance of Quarters	($)	9,584	9,584[2]	9,987	+403
	(FTE-T)	(112)	(112)	(103)	(-9)
Miscellaneous Permanent	($)	1,271	1,271[2]	1,271	--
	(FTE-T)	(14)	(14)	(14)	(--)
Construction (Trust Funds) Allocation to FHWA	(FTE-T)	(4)	(4)	(--)	(-4)
Trust Funds	($)	13,205	13,205	8,833	-4,372
	(FTE-T)	(48)	(48)	(48)	(--)
Subtotal	($)	24,060	24,060	20,091	-3,969
	(FTE-T)	(178)	(178)	(165)	(-13)
Budget Authority, Total, NPS	($)	900,220	862,545	734,275	-165,945
	(FTE-T)	(16,271)	(16,271)	(16,223)	(-48)

[1] Congress transferred $8.5 million from Visitor Facilities Fund to the "Construction" appropriation in fiscal 1986. The Service is proposing to transfer the same amount to Construction in fiscal 1987.

[2] In addition to permanent cancellation of budget authority, P.L. 99-177 sequesters $.467 million of spending authority in special accounts.

Highlights of the 1987 Request:

Operation of the National Park System

The fiscal 1987 budget request for the "Operation of the National Park System" appropriation is $596.5 million, a net decrease of $27.5 million from the 1986 appropriation. Increases are proposed to support the President's Commission on Americans Outdoors (+$314), to provide for increased costs associated with employee transfers to the Alaska Region (+$210), and to augment the uniform replacement allowance for field personnel (+$450). Additional operating funds are proposed for Castle Clinton National Monument and operation of restored structures at Ellis Island National Monument (+$3,577), the Constitutional Bicentennial celebration (+$353), to bring the Alaska Minerals Management Program into compliance with a Federal District Court order (+$2,700), water rights litigation in Western States (+$1,000), maintenance and security for the

General Statement

Haslett Warehouse at Golden Gate National Recreation Area (+$85), and to accommodate significantly increased utility costs resulting from the closure of the antiquated hydroelectric plant at Yosemite National Park (+$700).

In addition, increased funding is requested (+$3,754) to meet expected increases in fixed cost items, including GSA space rental, Employee Compensation Fund, postage and Federal Telecommunications Services (FTS). Under proposed legislation, the following programs will be funded under the "Operation of the National Park System-Fee Programs" account: a portion of the funds for the Regionwide Repair and Rehabilitation Program (-$9,154); the Informational Publications Program (-$2,890); fee collection costs (-$6,121); the Natural Resource Preservation Program (-$6,971); the Cultural Resources Preservation Program (-$5,193); the Harpers Ferry Center Program for Exhibit Preservation and Rehabilitation (-$3,962); the In-park Transportation System Program (-$4,002); and the Volunteers-in-Parks Program (-$487).

Funding is not requested in 1987 to support the Folger Library, Corcoran Gallery, Phillips Gallery, Arena Stage, National Capital Children's Museum, and the National Building Museum (-$1,659). Federal support for the United States Chapter of the International Council of Monuments and Sites (-$119) and for expanded technical assistance efforts in Latin America and the Carribbean (-$249) proposed is also eliminated.

National Recreation and Preservation Programs

Reductions are proposed in technical assistance to State and local governments, nationwide recreation data collection and policy analysis activities and the transfer of surplus Federal real property (-$343). Technical Assistance to States for natural programs will be eliminated (-$1,112) and the Grants Administration request is reduced (-$27) to reflect the continued reduction in workload as prior year grants from the Historic Preservation Fund are closed out.

Construction

The 1987 Construction Program proposes eight projects in seven park areas (+$19,318). Four projects (60 percent of request) represent planned fiscal 1987 phases of previously funded projects. All projects address health and safety or resource protection objectives. Three of the projects utilize monies derived from the Visitor Facilities Fund.

John F. Kennedy Center for the Performing Arts

Funding for the John F. Kennedy Center for the Performing Arts will be maintained at the base level ($4,771) for fiscal 1987.

Land Acquisition

No new acquisition funds are requested for 1987. Sufficient funding is included to continue emergency acquisitions and to pay anticipated deficiency court awards (+$8,000). The proposed amount for acquisition management (+$5,000) will be supplemented by $1.0 million to be deferred in 1986.

General Statement

Historic Preservation Fund

No new budget authority is requested for grants to States and to the National Trust for Historic Preservation.

Illinois and Michigan Canal National Heritage Corridor Commission

The Administration is proposing to eliminate direct Federal support for the Illinois and Michigan Canal National Heritage Corridor Commission.

Jefferson National Expansion Memorial Commission

The Administration is proposing to eliminate direct Federal support for the Jefferson National Expansion Memorial Commission.

Visitor Facilities Fund

In fiscal 1986, the projects programmed for accomplishment and financing through the Visitor Facilities Fund were transferred to the Service's regular Construction Program. For fiscal 1987, the Service proposes to again transfer $8.5 million from the Visitor Facilities Fund to the "Construction" appropriation. Funds derived from the VFF will be used to finance advance planning, project planning, and three fiscal 1987 line item construction projects which meet the criteria established for the VFF Program.

Operation and Maintenance of Quarters

Revenue from the rental of park housing is deposited in a special Treasury account to operate and maintain Government-owned quarters throughout the National Park System. The proposed increase reflects additional revenues estimated for 1987.

Proposed Legislation

Operation of the National Park System-Fee Programs

The Administration is proposing legislation to remove the present freeze on entrance fees for units of the National Park System and to create a new appropriation for recreation fee revenues. Under this proposal, 80 percent of the total collections estimated for fiscal 1987 would be available to the National Park Service from the new account to cover the cost of fee collection, enhance park operations in the collecting parks, and finance various Servicewide programs.

The legislation will permit increases in current entrance fees and the initiation of entrance fees at a number of parks that are presently free of charge. Under this program, total recreation fee revenues are estimated at $73.8 million, of which 80 percent or $59 million would be available to the National Park Service to carry out the program and activities listed below.

1. Transfers from the "Operation of the National Park System" appropriation:

General Statement

	($000's)	FTE
Fee Collection Activities	6,121	307
Informational Publications	2,890	23
Visitor Transportation Systems	4,002	--
Harpers Ferry Center--Exhibit Rehabilitation Program	3,962	98
Cultural Resources Preservation Program	5,193	--
Natural Resources Preservation Program	6,971	--
Volunteers-in-Parks Program	487	--
Maintenance--Repair and Rehabilitation Projects	9,154	--
Subtotal, Proposed Transfers	38,780	428

2. Increases proposed for transferred programs and park operations:

Information Publications	510	--
Volunteers-in-Parks Program	503	--
Fee Collection Costs	5,000	100
Enhanced park operating programs	14,207	--
Subtotal, Proposed Increases	20,220	100
Grand Total	59,000	528

Management Improvements

In fiscal 1987, as part of an ongoing effort to streamline administrative and support functions, the Service will initiate actions to close the Regional Office in Seattle, Washington. With the creation of a separate Regional Office in Anchorage, Alaska, in 1980 to manage the Alaska parks, the Pacific Northwest Region was reduced to 18 parks in three States: Washington, Oregon, and Idaho. The number of areas and related staff and funding resources administered from the Seattle office is significantly less than other Regional Offices as indicated by the table below:

Region	Areas	FY 1986 Operations Funds	FY 1986 Operations FTE
Rocky Mountain	41	$70,823	1,975
North Atlantic	34	44,133	1,389
Mid-Atlantic	28	45,480	1,300
Southeast	54	74,159	2,225
Midwest	31	37,133	1,036
Southwest	36	36,275	1,071
Western	44	89,180	2,477
National Capital	30	90,647	2,206
Alaska	23	18,422	271
Pacific Northwest	15	28,065	749

The fiscal 1986 budget for operating the Seattle office is $4.2 million and 110 FTE's. All permanent employees will be given the option of relocating to a funded vacant position in a park or another Regional Office. Reduced operating costs for fiscal 1987 will be offset by one-time expenses for lump sum leave and severance payments for those employees who choose not to relocate or relocation expenses for those employees who move to other positions. Thus, no net savings are included in the fiscal 1987 budget.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

STATEMENT OF RECEIPTS
(in thousands of dollars)

	Actual	Estimated	
	1985	1986	1987
General Fund of the U.S. Treasury			
Sale of timber, wildlife and other natural land products, not otherwise classified (for NPS, almost entirely sale of fallen timber, mostly to individuals)..................................	21	21	21
Fees and other charges for program administrative services (for NPS, almost entirely for processing requests for Tax Act certification of rehabilitation of historic properties, except as noted)..................................	940	2,300	17,050*
Total reported by NPS to the General Fund..........	961	2,321	17,071
Special Funds			
Land and Water Conservation Fund:			
Recreation fees..................................	20,922	21,300	0*
Surplus property sales..........................	140	140	140
Total, Land and Water Conservation Fund..........	21,062	21,440	140
National Park System Recreation Fees...............	0	0	59,000*
Visitors Facilities Fund (business concessions)...	7,334	8,500	9,000
Rents and charges for quarters......................	8,354	9,584	9,987
Miscellaneous permanent appropriations............	1,028	1,271	1,271
Recreation fees used for:			
Educational expenses, children of employees, Yellowstone National Park..........	(565)	(555)	(555)
Payment for tax losses on land acquired for Grand Teton National Park.................	(35)	(30)	(30)
Miscellaneous trust funds..........................	11,820	13,205	8,833
Memo: Total recreation fees........................	(21,522)	(21,885)	(74,335)
Total reported by NPS to special funds.............	49,598	54,000	88,231
Grand total reported by NPS........................	50,559	56,321	105,302

Above amounts exclude receipts reported by the Department of Treasury.

*Reflects legislative proposal to allow new and increased entrance fees and to deposit 80% of recreation fees in a new special fund and 20% ($14,750,000 estimated) in the General Fund.

NATIONAL PARK SERVICE

SUMMARY OF APPROPRIATIONS, REVENUES, AND VISITS

Fiscal Year	Appropriations a/ Operating Programs	Grants and Assistance Programs	Acquisition, Planning and Development	Total	Revenues General Fund	Special Fund 1/	Total Recorded Visits
1976	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Transition	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1977	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1978	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1979	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1980	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1981 b/	[illegible]	[illegible]	[illegible] c/	[illegible]	[illegible]	[illegible]	[illegible]
1982	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1983	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1984	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 2/
1985	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1986 3/	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1987	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

a/ [illegible]

b/ [illegible]

c/ [illegible]

1/ [illegible]

2/ [illegible]

3/ [illegible]

Appropriation Summary Statement

Appropriation: Operation of the National Park System

The National Park System contains 337 areas which cover 79.4 million acres of land. Parks are located in 49 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and the Northern Marianas. These parks have in common their national significance as determined by the Congress and the President. They have been established to protect and preserve for all Americans the cultural and natural heritage of this country. This appropriation includes funds to operate individual units of the National Park System and provides for planning and administrative support for the system as a whole. The principal funded activities include:

1. Park Management: This activity covers the management and supervision of park areas; maintenance of buildings and other facilities required to accommodate visitor use, as well as to protect the Government's investment; interpretive programs to enhance the visitors' park experience; law enforcement to protect the visitors' well-being and reduce vandalism and other destruction to park resources; and resources management necessary for the protection and preservation of the unique natural, cultural, and historical features in the National Park System.

2. Forest Fire Suppression and Presuppression: This activity provides for the suppression and emergency presuppression of fires on or endangering lands administered by the Service, for the rehabilitation of burned areas to conserve resources, and for the protection of park visitors.

3. Park, Recreation and Wilderness Planning: This activity provides for studies, investigations, and planning programs to support and direct the overall development and management of park areas and to protect and manage water resources. The specific programs under this activity are: (1) General Management Plans and (2) Water Resources Studies.

4. Statutory or Contractual Aid: Under this activity, the Service provides financial or other assistance in the planning, development, or operation of natural, historical, cultural or recreation areas not managed by the National Park Service.

5. General Administration: This activity covers administrative support functions in the Washington and Regional Offices, GSA space rental, executive direction, ADP services, payments to the Employees' Compensation Fund, unemployment payments to former personnel, and public affairs activities.

Major Changes from the base level for 1987 include:

Park Management: (-$33,728,000)

The decrease for Park Management is distributed by function as follows:

Management of Park Areas, +$874,000; Interpretation and Visitor Services, -$7,706,000; Visitor Protection and Safety, -$5,034,000; Maintenance, -$9,266,000; Resources Management, -$4,324,000; Informational Publications, -$2,990,000; International Park Affairs, -$348,000; and Volunteers in Parks, -$467,000.

Appropriation/Operation of the National Park System

The net decrease for each function, except International Park Affairs, is a result of the decision to fund eight major park operational and support activities, totalling $38,780,000, from the $59 million in recreation fee revenues under proposed legislation.

Other increases and decreases proposed include: support for the President's Commission on Americans Outdoors, (+$314,000); increased uniform allowances for field personnel, (+$450,000); increased employee transfer costs for the Alaskan region, (+$210,000); operating costs for the restored Statue of Liberty and Ellis Island monuments, (+$3,577,000); support for the Bicentennial of the U.S. Constitution, (+$353,000), increased utility costs at Golden Gate National Recreation Area and Yosemite National Park (+$785,000); funding to effectively implement regulations (+$2,700,000); and elimination of Federal support for The United States Chapter of International Council on Monuments and Sites and technical assistance for Latin America and the Carribean, (-$368,000).

Park, Recreation and Wilderness Planning: (+$1,000,000)

Additional funds are proposed to support the Service's position on water rights litigation in several Western States.

Statutory or Contractual Aid for other Activities: (-$1,659,000)

Funding to support the Folger Library, Corcoran Gallery, Phillips Gallery, Arena Stage, National Capital Children's Museum, and National Building Museum is not being requested for 1987. These organizations are eligible to participate in a grant program administered by the National Endowment for the Humanities.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

OPERATION OF THE NATIONAL PARK SYSTEM

For expenses necessary for the management, operation, and maintenance of areas and facilities administered by the National Park Service (including special road maintenance service to trucking permittees on a reimbursable basis), and for the general administration of the National Park Service, including not to exceed [$410,000] $408,000 for the Roosevelt Campobello International Park Commission, [$490,000 for the Volunteers-in-the-Park program, not less than $3,300,000 for high priority projects within the scope of the approved budget which shall be carried out by Youth Conservation Corps as if authorized by the Act of August 13, 1970, as amended by Public Law 93-408, and $175,000 for the National Capital Children's Museum and $175,000 for the Arena Stage as if authorized by the Historic Sites Act of 1935 (16 U.S.C. 462(e)), $627,763,000] $596,482,000 without regard to the Act of August 24, 1912, as amended (16 U.S.C. 451): Provided, That the Park Service shall not enter into future concessionaire contracts, including renewals, that do not include a termination for cause clause that provides for possible extinguishment of possessory interests excluding depreciated book value of concessionaire investments without compensation: Provided further, That hereafter appropriations for maintenance and improvement of roads within the boundary of Indiana Dunes National Lakeshore shall be available for such purposes without regard to whether title to such road rights-of-way is in the United States [:Provided further, That $85,000 shall be available to assist the town of Harpers Ferry, West Virginia, for police force use: Provided further, That the educational center to be located at the Boott Mill Complex, Building No. 6, in the Lowell National Historical Park, Massachusetts, is hereby designated and shall be known as the "Paul E. Tsongas Industrial History Center":Provided further, That $150,000 shall be available solely for the restoration and renovation of the Lonoke Depot in Lonoke, Arkansas].
(5 U.S.C. 5901-03; 16 U.S.C. 1, 1a-5, 1b, 1c, 3, 7a-e, 8b, 8d, 17j-2, 17k-1, 17n, 18f, 18g, 47-2, 431-433, 461-467, 590a, 590f, 594, 1281c, 4601-4601-3, 469c, 470, 2501; 43 U.S.C. 620 (g); Act of July 7, 1964 (78 Stat. 299); Act of September 3, 1964 (78 Stat. 890); Public Law 96-344; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.

Appropriation Language Citations

Appropriation: Operation of the National Park System

Appropriation language and citations:

1. For expenses necessary for the management, operation, and maintenance of areas and facilities administered by the National Park Service

   5 U.S.C. 5901-5903; 16 U.S.C. 1, 1b, 1c, 3, 7a-e, 8b, 8d, 17j2, 18f, 18g, 47-2, 431-433, 461-467, 594, 1281c; 43 U.S.C. 620g.

   The code citations provide authority for the establishment of the National Park Service and describe the functions and responsibilities bestowed upon the Service.

   5 U.S.C. 5901-5903 provides a uniform allowance for employees of the National Park Service.

   16 U.S.C. 1, 1b, 1c, 3, 7a-e, 8b, 8d, 17j2, 18f, 18g, 47-2, 431-433, 461-467, 590a, 590f, 594, 1281c, (1) provides for the creation of the National Park Service and describes its functions, (2) provides for the granting of privileges, leases, and permits for the use of the land for the accommodation of visitors in the various parks, monuments, or other reservations, (3) provides for maintenance of national park approach roads, (4) provides for recruitment, training and acceptance of volunteers for visitor services in areas administered by the National Park Service, (5) provides for the President to declare by public proclamation historic landmarks, structures, and other objects to be national monuments, (6) provides for the Secretary of the Interior to acquire property, restore, reconstruct, rehabilitate, preserve, and maintain historic or prehistoric sites, buildings, objects, and properties of national historical or archeological significance, (7) to provide for any component of the National Wild and Scenic Rivers System that is administered by the National Park Service to become part of the National Park System.

   43 U.S.C. 620(g) provides, in connection with the development of the Colorado River storage project and of participating projects, for authorization to investigate, plan, construct, operate, and maintain public recreational facilities on lands withdrawn or acquired for the development of said projects, and to conserve the scenery, the natural, historic, and archeological objects, and the wildlife on said lands, and to provide for public use and enjoyment of the same and of water areas created by these projects.

2. (including special road maintenance service to trucking permittees on a reimbursable basis),

   No specific authority

   This provision was inserted into the appropriation language in the 1954 fiscal year budget. It stemmed from an emergency need that developed during 1952 at Big Bend National Park, Texas. The road system at Big Bend became a transit for the heavy trucking of ore for defense purposes between

Boquillas, Mexico, and the nearest railroad at Marathon, Texas. The weight, size, and capacity of the trucks being used was far beyond that for which the park road system was designed. As a result, the additional cost for maintenance and repair was far in excess of our available road maintenance funds. To meet this emergency, the Defense Materials Procurement Agency made available the sum of $100,000 to rehabilitate and strengthen the road, with the understanding that the National Park Service would subsequently maintain all sections of it, such maintenance to be financed by reimbursement from the trucking permittees at a rate of 2¢ per mile.

3. and for the general administration of the National Park Service,

16 U.S.C. 1, 1b, 1c, 3

This provision is proposed because of the desire of Congress to collect an agency's administrative expenses in one appropriation. The General Administration activity under the "Operation of the National Park System" appropriation includes administrative costs relating to programs funded in the "Construction," "National Recreation and Preservation," "John F. Kennedy Center for the Performing Arts," "Historic Preservation Fund," and "Urban Park and Recreation Fund" appropriations.

4. including not to exceed $______ for the Roosevelt Campobello International Park Commission, $__________

P.L. 88-363 (78 Stat. 299)

P.L. 88-363 (78 Stat. 299) provides the establishment of the Roosevelt Campobello International Park Commission and defines the Commission's powers and the commitments of the United States to the agreement. It authorizes appropriation to the Department of the Interior without fiscal year limitation such sums as may be necessary for the purposes of this Act and the agreement with the Government of Canada signed January 22, 1964, of which article 11 provides that the Governments of the United States and Canada shall share equally the costs of developing and the annual cost of operating and maintaining the Roosevelt Campobello International Park.

5. without regard to the Act of August 24, 1912, as amended (16 U.S.C. 451):

16 U.S.C. 451

16 U.S.C. provides a limitation of $3,000 for construction of any building in any national park except under express authority of Congress.

6. Provided, That the Park Service shall not enter into future concessionaire contracts, including renewals, that do not include a termination for cause clause that provides for possible extinguishment of possessory interests excluding depreciated book value of concessionaire investments without compensation:

No specific authority

This provision was inserted into the appropriation language in the 1981 fiscal year budget by the Congress as a result of its interest and concern in concessionaire contracting.

7. Provided further, That hereafter appropriations for maintenance and improvement of roads within the boundary of Indiana Dunes National Lakeshore shall be available for such purposes without regard to whether title to such road rights-of-way is in the United States.

No specific authority

This provision was inserted into the appropriation language in the 1981 fiscal year budget by the Congress. Funds for maintaining non-NPS owned roads within the boundary of the park were originally provided by Congress in fiscal 1980 appropriations. They remain available for this purpose in fiscal 1987.

Operation of the National Park System

Justification of Proposed Language Changes

1. Deletions: "$490,000 for the Volunteers-in-the-Park program, not less than $3,300,000 for high priority projects within the scope of the approved budget which shall be carried out by Youth Conservation Corps as if authorized by the Act of August 13, 1970, as amended by Public Law 93-408, and $175,000 for the National Capital Children's Museum and $175,000 for the Arena Stage as if authorized by the Historic Sites Act of 1935 (16 U.S.C. 462(e)),"

   "$85,000 shall be available to assist the town of Harpers Ferry, West Virginia, for police force use:"

   Funds for the above items are not requested in 1987. Therefore, this language is no longer necessary.

2. Deletion: "Provided further That the educational center to be located at the Boott Mill Complex, Building No. 6, in the Lowell National Historical Park, Massachusetts, is hereby designated and shall be known as the 'Paul E. Tsongas Industrial History Center':"

   This provision has accomplished its purpose and is no longer needed.

3. Deletion: "Provided further, That $150,000 shall be available solely for the restoration and renovation of the Lonoke Depot in Lonoke, Arkansas"

   Funds for this item are not requested in 1987. Therefore this language is no longer necessary.

Summary of Requirements

Appropriation: Operation of the National Park System

(Dollar amounts in thousands)

SUMMARY OF BASE ADJUSTMENTS:	FTE/T	Amount	FTE/T	Amount
Appropriation, 1986			14,649	623,996
P.L. 99-177 Reduction			--	-26,832
(1) Adjusted Appropriation, 1986				597,164
Pension payments, United States Park Police	--	+975		
Rental Payments to GSA (SLUC)	--	+1,169		
Employees' Compensation Fund	--	+1,010		
Federal Telecommunications System (FTS)	--	+400		
Postage	--	+200		
Transfer from Fire Fighting and Rehabilitation Bureau of Land Management	--	+150		
(2) Adjustment for 1986 impact of P.L. 99-177	--	+26,832		
Total adjustments			--	+30,736
1987 Base Budget			14,649	627,900

Comparison by activities/ subactivities	1985 Actual		1986 Appropriation Enacted to Date		P.L. 99-177 Reduction	FY 1986 Adjusted Approp.	Fiscal 1987 Base		Fiscal 1987 Estimate		Inc. or Dec.() from 1986 Appropriation		Inc. or Dec.() from 1986 Adjusted Approp.	Inc. or Dec.() Over 1987 Base	
	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Amount	FTE-T	Amount
Park Management:															
Management of Park Areas	1,828	62,680	1,737	61,524	(2,646)	58,878	1,737	61,524	1,737	62,498	—	974	3,620	—	974
Concessions Management	87	3,500	87	3,548	(153)	3,395	87	3,548	87	3,548	—	0	153	—	—
Interpretation and Visitor Services	2,088	63,839	2,088	65,119	(2,800)	62,319	2,088	65,119	1,998	57,413	(90)	(7,706)	(4,906)	(90)	(7,706)
Visitor Protection and Safety	2,804	78,982	2,804	81,220	(3,492)	77,728	2,804	82,195	2,512	76,361	(292)	(4,859)	(1,367)	(292)	(5,834)
Maintenance	4,817	235,900	4,802	239,070	(10,282)	228,788	4,802	239,070	4,832	233,826	30	(5,244)	5,038	30	(5,244)
Resources Management	1,847	96,034	1,847	95,641	(4,113)	91,528	1,847	95,641	1,879	86,437	32	(9,204)	(5,091)	32	(9,204)
Informational Publications	23	2,850	23	2,890	(124)	2,766	23	2,890	—	—	(23)	(2,890)	(2,766)	(23)	(2,890)
International Park Affairs	10	518	10	791	(33)	758	10	791	10	423	—	(368)	(335)	—	(368)
Volunteers-in-Parks	—	490	—	487	(21)	466	—	487	—	0	—	(487)	(466)	—	(487)
Subtotal	13,504	544,793	13,398	550,290	(23,664)	526,626	13,398	551,265	13,055	520,506	(343)	(29,784)	(6,120)	(343)	(30,759)
Forest Fire Suppression and Presuppression:	—	5,076	—	1,169	(50)	1,119	—	1,319	—	1,319	—	150	200	—	—
Park, Recreation and Wilderness Planning:															
Water Resources Studies	13	1,908	13	1,909	(82)	1,827	13	1,909	13	2,909	—	1,000	1,082	—	1,000
General Management Plans	61	2,360	61	2,332	(100)	2,232	61	2,332	61	2,332	—	—	100	—	0
Subtotal	74	4,268	74	4,241	(182)	4,059	74	4,241	74	5,241	—	1,000	1,182	—	1,000
Statutory and Contractural Aid:															
Roosevelt Campobello Park	—	410	—	408	(18)	390	—	408	—	408	—	—	18	—	—
Ice Age National Scientific Reserve	—	576	—	573	(25)	548	—	573	—	573	—	—	25	—	—
Lowell Historic Preservation Commission	14	526	14	537	(24)	513	14	537	14	537	—	—	24	—	—
Folger Library	—	343	—	174	(7)	167	—	174	—	—	—	(174)	(167)	—	(174)
Corcoran Gallery	—	343	—	174	(7)	167	—	174	—	—	—	(174)	(167)	—	(174)
Mary Mcleod Bethune NHS	—	98	—	99	(4)	95	—	99	—	99	—	—	4	—	—

Negative amounts shown in (   ).

Comparison by activities/ subactivities	1985 Actual		1986 Appropriation Enacted to Date		P.L. 99-177 Reduction	FY 1986 Adjusted Approp.	Fiscal 1987 Base		Fiscal 1987 Estimate		Inc. or Dec.() from 1986 Appropriation		Inc. or Dec.() from 1986 Adj. Approp.	Inc. or Dec.() Over 1987 Base	
	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Amount	FTE-T	Amount
Martin Luther King, Jr. Center for Non-violent Social Change	—	198	—	199	(9)	190	—	199	—	199	—	—	9	—	—
Phillips Gallery	—	343	—	174	(7)	167	—	174	—	—	—	(174)	(167)	—	(174)
Arena Stage	—	343	—	174	(7)	167	—	174	—	—	—	(174)	(167)	—	(174)
National Building Museum	—	343	—	174	(7)	167	—	174	—	—	—	(174)	(167)	—	(174)
National Capital Children's Museum	—	343	—	174	(7)	167	—	174	—	—	—	(174)	(167)	—	(174)
William McKinley Tomb	—	—	—	447	(20)	427	—	447	—	—	—	(447)	(427)	—	(447)
Fisk University, Jubilee Hall	—	—	—	168	(7)	161	—	168	—	—	—	(168)	(161)	—	(168)
Subtotal	14	3,866	14	3,475	(149)	3,326	14	3,475	14	1,816	—	(1,659)	(1,510)	—	(1,659)
General Administration:															
Central Office	174	6,426	154	5,820	(250)	5,570	154	5,820	154	5,820	—	—	250	—	—
Regional Office	627	16,839	559	14,993	(645)	14,348	559	14,993	559	14,993	—	—	645	—	—
Automatic Data Processing	73	4,789	73	4,827	(208)	4,619	73	4,827	73	4,827	—	—	208	—	—
Servicewide Administrative Support	—	6,601	—	6,561	(282)	6,279	—	7,161	—	7,161	—	600	882	—	—
General Services	—	392	—	390	(17)	373	—	390	—	390	—	—	17	—	—
Employees' Compensation Payments	—	3,950	—	4,345	(187)	4,158	—	5,355	—	5,355	—	1,010	1,197	—	—
Unemployment Compensation	—	8,500	—	7,892	(339)	7,553	—	7,892	—	7,892	—	—	339	—	—
GSA Space Rental	—	13,011	—	11,696	(503)	11,193	—	12,865	—	12,865	—	1,169	1,672	—	—
Executive Direction	146	6,585	146	6,544	(281)	6,263	146	6,544	146	6,544	—	—	281	—	—
Public Affairs	43	1,722	43	1,753	(75)	1,678	43	1,753	43	1,753	—	—	75	—	—
Subtotal	1,063	68,815	975	64,821	(2,787)	62,034	975	67,600	975	67,600	—	2,779	5,566	—	—
Special Summer Programs	176	—	188	—	—	—	188	—	188	—	—	—	—	—	—
Total, Operation of the National Park System	14,831	626,818	14,649	623,996	(26,832)	597,164	14,649	627,900	14,306	596,482	(343)	(27,514)	(682)	(343)	(31,418)

Negative amounts shown in ( ).

NATIONAL PARK SERVICE

Justification of Adjustments to Base

(dollar amounts in thousands)

FTE-T Amount

Appropriation: Operation of the National Park System

Adjustment for FY 1985 P.L. 99-177 B.A. Cancellations............ — +26,832

The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), requires a 4.3 percent reduction in non-exempt programs. Since this reduction occurs only in FY 1986, this adjustment is made to allow a more comparable basis for showing program changes from FY 1986 to FY 1987.

United States Park Police Pension Fund........................... -- +975

U.S. Park Police officers retiring in fiscal 1986 will create a net additional requirement of $975,000 for the U.S. Park Police Pension Fund.

Rental Payments to GSA (SLUC)................................... -- +1,169

This increase is a result of an appraisal and rate determination made by the GSA. The 1987 estimate of $12,865,000 is an increase of $1,169,000 over the 1986 appropriation of $11,696,000.

Employees' Compensation Fund..................................... -- +1,010

The increase in the repayment to the Employees' Compensation Fund is the result of higher costs for compensation to injured employees. These charges will be reimbursed to the Department of Labor, Employees Compensation Fund, in fiscal 1987 pursuant to Public Law 94-273.

Federal Telecommunications System............................... -- +400

The Service is incurring higher costs for the Federal Telecommunications System (FTS) as a result of rate increases and a change in billing method by the General Services Administration that more accurately reflects actual usage.

Postage... -- +200

The proposed adjustment will cover higher costs due to postal usage increases.

Transfer from Fire Fighting and Rehabilitation, Bureau of Land Management.. -- +150

The proposed transfer will cover the National Park Service's share of the operating costs for the Alaska Fire Service.

NATIONAL PARK SERVICE
Analysis by Subactivity

Activity: Park Management

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Enacted to date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase (+) or Decrease (-) 1987 Est. over 1987 Base
Management of Park Areas	$62,480	$61,524	58,878	$61,524	$62,498	$+974
Concessions Management	3,500	3,548	3,395	3,548	3,548	--
Interpretation and Visitor Services	63,839	65,119	62,319	65,119	57,413	-7,706
Visitor Protection and Safety	78,982	81,220	77,728	82,195	76,361	-5,834
Maintenance	235,900	239,070	228,788	239,070	233,826	-5,244
Resources Management	96,034	95,441	91,528	95,641	86,437	-9,204
Informational Publications	2,850	2,890	2,766	2,890	--	-2,890
International Park Affairs	518	791	738	791	423	-368
Volunteers-in-Parks	490	487	466	487	--	-487
Total	544,793	550,290	526,626	551,265	520,506	-30,759

Justification of Program and Performance

Activity: Park Management
Subactivity: Management of Park Areas

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Management of Park Areas	($)	61,526	58,878	61,526	62,400	+874
	(FTE-T)	(1,737)	(1,737)	(1,737)	(1,737)	(---)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Management of Park Areas	61,526	-2,648	58,878

As a result of the $2,648,000 P.L. 99-177 reduction, the Service will reduce park management and administrative support functions. The number of seasonal, part-time, and temporary administrative and clerical positions will be reduced. Travel and training will be curtailed, and the purchase of major office equipment will be deferred.

Servicewide programs will be affected through reduced travel and non-mandatory training opportunities, fifty fewer Student Conservation Association participants, fewer park appraisals by [illegible] specialists, and other areas of reduced administrative and professional support provided to parks.

Authorization

16 U.S.C. 1 The National Park Service Organic Act
P.L. 96-487 Alaska National Interest Lands Conservation Act

Objectives

To manage parks so that resources are protected, visitors served, and applicable regulations are observed.

Base Program

The NPS uses the funding from this activity to pay for in-park management and administration. These functions are carried out by the Park Superintendent and the administrative staff. In a small park, the administrative staff might be limited to a secretary or an administrative clerk. Most larger parks have an administrative officer, procurement and personnel clerks, and other administrative specialists. The large number of seasonals hired and the amount of goods and services purchased locally mean that support in purchasing and personnel is usually needed in larger parks. A total of $60.9 million and 1,696 FTE's are included in the base for in-park administration.

[illegible]

[illegible]

	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

approval for quarters, and maintains the Register of Required Occupancy. Rate comparability appraisal surveys are scheduled by the Department of the Interior and are conducted by private appraisers. Regional Quarters Officers are responsible for informing park managers who must apply the rates and adjustments to individual quarters units and handle the assignment of quarters to tenants. Funding covers the Washington Office staff, contract appraisals, and Departmental expenses.

	Base Amount	FTE-P
Appalachian Trail Project	$438	7

Budgeted funds are used to operate the Appalachian Trail Project Office in Harpers Ferry, West Virginia, which provides overall coordination of the Appalachian Trail Project for the National Park Service. The principal functions of this office include:

1. Oversight, monitoring, and coordination of land protection activities;
2. Establishment and coordination of the cooperative management program with the U.S. Forest Service, State agencies and local trail clubs;
3. Staff support for the Appalachian National Scenic Trail Advisory Council; and
4. Completion of boundary surveys for recently acquired tracts.

	Base Amount	FTE-P
Statistical Assistance Program	$269	6

The Statistical Assistance Program exists to develop and provide socio-economic intelligence about outdoor recreation activity for improved planning and management. These data include both primary data about public use of the parks and secondary data about travel trends and tourism economics. A small staff located in Denver, Colorado, produces a series of periodical statistical reports (monthly State reports, national summaries and an annual abstract) as well as various ad-hoc studies (Regional trends, urban-rural park variations, etc.). Data on visitor use are available to the public through publications of the Bureau of Labor Statistics and the U.S. Travel Data Center.

	Base Amount	FTE-P
Professional Publications Program	$138	3

Funds programmed for this activity provide for staff and related expenses to review and select certain professional and scientific manuscripts, prepared under National Park Service auspices for publication. National Park Service personnel choose the publication topics, assist in the layout and design, edit and revise the final manuscript, and arrange for publication through Federal or private sources.

Park Management/Management of Park Areas

	Base Amount	FTE-T
Emergencies: Storm and Flood Damage, Search and Rescue Operations, Structural Fire Damage	$3,415	--

During the course of a typical operating year, a number of parks sustain damage due to natural causes, fire, and incur inordinately large expenses for search and rescue operations. Funds budgeted under this item are used to cover such contingencies so that operating funds do not have to be diverted from ongoing and essential park programs. During fiscal 1985, for example, funds were expended to successively conduct the following actions:

-- On June 22, 1985, a couple was descending a large snowfield above Emerald Lake at Rocky Mountain National Park, Colorado when they lost their footing and slid 400 feet through a rock field and suffered severe, multiple injuries. They were located after a sustained search effort conducted by 35 park and volunteer rescue personnel and evacuated safely to the nearest hospital. Total cost of this rescue was $3,265.

-- During the period of February 22-24, 1985, intensive flood damage occurred at Ozark National Scenic River and George Washington Carver National Monument, Missouri. The flood on the Jacks Fork River at Ozark exceeded any on record, while water levels at other guaging stations were almost as high as the flood of April 1983. At George Washington Carver, rain fall exceeded 7 inches in 36 hours causing surrounding creeks to rise 8 feet above normal which required the rebuilding of the park's principal trail and boundary fence. Extensive water damage occurred at facilities at all three Ozark districts, and repair work to both parks totalled over $370,000.

	Base Amount	FTE-T
Incidental Personnel Expenses	$3,320	--

These funds cover employee transfer costs, lump sum leave and severance payments and incentive awards to meritorious employees.

Increase for 1987	1987 Base	1987 Estimate	Increase
$	61,524	62,498	+974
(FTE-T)	(1,737)	(1,737)	(--)

A summary of the proposed increase by category is shown below:

	($000's)	FTE
Increase transfer costs in the Alaska Region.............	$210	--
Increase uniform allowances to cover increased costs....	450	--

Park Management/Management of Park Areas

Support operations of the President's Commission on Americans Outdoors.................................... $314 --

1. Increase Transfer Costs in the Alaska Region .... $210 -- FTE

Recent changes in Federal travel regulations for permanent changes of station have escalated transfer costs to the point where many programs have been reduced to absorb the higher costs and where location has become a disproportionate factor in making personnel selections in Alaska Region parks. For example, subsistence while occupying temporary quarters was increased by the revised regulations from 30 days to a possible 120 days. An average cost for a family of 4 occupying temporary quarters for 120 days in Alaska, which is common in such areas as Nome, Kotzebue and Eagle, is now $24,000. Additional expenses related to residence transactions can be claimed for up to 2 years and have increased the number of items that may be claimed, resulting in a 50-60 percent increased cost to the Government. Weight allowances have increased from 11,000 pounds to 18,000 pounds and temporary storage of household goods has been increased to 1 year and may be extended for partial storage in isolated areas up to 3 years. Many of the park areas outside Anchorage are considered hardship areas, resulting in a higher than average turnover of personnel.

This increase will provide Alaskan parks and the Regional Office with sufficient funds to continue necessary transfer of personnel. Without it, parks will be forced to use funds already programmed in other functions, or leave positions vacant for unacceptable lengths of time.

2. Increase Uniform Allowances to Cover Increased Costs.. $450 -- FTE

Uniform allowance rates for employees are managed by the Service in accordance with the General Authorities Bill (P.L. 94-458) and by the Service's policy on uniform use and replacement requirements. The Service currently provides an annual replacement amount of up to $200 which has not been adjusted since 1976. However, unit costs have increased as much as 50 to 65 percent since the current and replacement allowances took effect. The uniform allowance is provided to help defray the cost of wearing a uniform and not intended to cover the total cost of all uniform items. However, employees are paying a higher percentage of the total replacement need than should be expected of them and in many cases forcing them to be out of compliance with established National Park Service Uniform Standards because of higher replacement costs and the fixed level of the uniform allowance. Providing a modest Servicewide increase in the quarterly replacement amounts of approximately 20% will help correct this problem.

3. Support activities of the President's Commission on Americans Outdoors................................ $314 -- FTE

Executive Order 12503, signed January 28, 1985, established the President's Commission on Americans Outdoors. The commission's charge is to examine and evaluate existing and potential outdoor recreation policies, programs, and opportunities provided by all levels of government and the private sector. It is also directed to make recommendations to the President concerning these policies and programs which will ensure the future availability of outdoor recreation for the American public. The commission, comprised of 15 distinguished individuals representing

Park Management/Management of Park Areas

Congress, State, and local governments, the private sector, and recreation and conservation interest groups, will serve without compensation. They will, however, require a support staff to aid in their mission. The Department of the Interior has been given the responsibility for providing administrative and support services, with the National Park Service and other bureaus which hold major recreation responsibilities sharing in the cost of the support. This increase will provide funding for the support activities during the time in fiscal 1987 when the commission will be in operation. The final report must be submitted to the President no later than December 31, 1986, and the commission will terminate 30 days after submission of the report. It will provide for support staff salaries and benefits, travel expenses of commission members and staff, public hearings to be held at various locations throughout the country, printing of the commission's report, and other related expenses.

Distribution of increase by object class

	Amount
Personnel services	+$112,000
Personnel benefits	+12,000
Travel and transportation of persons	+190,000
Transportation of things	+120,000
Printing and reproduction	+50,000
Other services	+45,000
Supplies and materials	+445,000
Total	+974,000

Justification of Program and Performance

Activity: Park Management
Subactivity: Concessions Management

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Concessions	($)	3,548	3,395	3,548	3,548	---
Management	(FTE-T)	(87)		(87)	(87)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Concessions Management	3,548	-153	3,395

As a result of the $153,000 P.L. 99-177 reduction, special studies needed to determine economic conditions prior to concessions contracting and appraisals to determine appropriate building use fees for concessioners occupying Government facilities will be reduced.

Authorization

Public Law 89-249	National Park Concessions Policies Act of 1965
16 U.S.C. 1	The National Park Service Organic Act

Objectives

In accordance with Public Law 89-249, the National Park Service is responsible for conducting a program to: (1) encourage and enable private persons and corporations (concessioners) to provide and operate facilities and services which are deemed necessary and appropriate for the accommodation of visitors in areas administered by the National Park Service; (2) ensure that concessioners provide quality facilities and services at reasonable rates; and (3) ensure a reasonable opportunity for the concessioner to realize a profit for its operation as a whole commensurate with the capital invested and obligations assumed.

Base Program

The Concessions Management Program exists to satisfy a need for commercial services by the public for their enjoyment of the National Park System, and to protect the best interest of the Government against unnecessary financial obligation. In many cases, parks are located in remote areas where lodging, food, gasoline, vehicle repairs, transportation, general merchandise, and other goods and services are not conveniently available. Thus, it becomes necessary to have concessioner-operated facilities within park areas to provide such commercial services to the public. In order to provide quality commercial services, the Service is stressing the team relationship between the National

Park Service and its concessioners in accordance with Point #11 of the Director's 12-Point Plan. The responsibilities of the Service's Concessions Management Program include:

1. Determining what facilities and services are necessary and appropriate.

   Such determination entails conducting marketing, economic feasibility, geographic and demographic studies as well as having an understanding of the attractions, characteristics, and purpose of the area. Such studies may be solely concession oriented because of concession contract expiration dates, but are usually part of the overall planning process for a new area or an established area and included as part of a General Management Plan or Development Concept Planning Study. Currently, studies are underway at more than 20 different parks. Concessions involvement may take 4 to 6 work-months per project, but at times, because of complexities and the size of the area, considerably more time is required. These projects are generally accomplished by the Branch of Concessions, Denver Service Center, with Washington Office overview.

2. Establishing Servicewide concession planning and design review to assure provision of necessary and appropriate concession facilities and services.

   Policies and procedures have been developed for the renovation and construction of concession facilities to assure operational efficiencies, design standards, equipment requirements and space needs for various types of operations. The planning and design review assures high quality and efficient service to park visitors.

   The workload required depends on the size and complexity of the project and includes several disciplines including public health and safety. The conceptional stage to the final design review could require several years and is usually accomplished at the Denver Service Center with input from parks and Regions.

3. Evaluating performance of concessioners' delivery of services and quality of facilities maintained.

   The Concessioner Review Program has been developed to assure that visitor services are provided at a high level of quality, safety, and sanitation and to assure that concessioners meet the requirements pursuant to the concessions contract and/or permit.

   The Concessioner Review Program consists of two subprograms: (1) Operational Performance Program and (2) Contract Compliance Program.

   Operational Performance Program: The Operational Performance Program assures that concessioner facilities and services are safe, sanitary, attractive, and provided at quality levels the park visitor expects from the private sector operating outside the park. The program provides consistency throughout the Service through published NPS operational standards for nearly all NPS concession facilities and services. It provides support to park management in identification of deficiencies and assists management in determining whether a concessioner should be granted a right of preference to contract or permit renewal. Concessioners also benefit in that they have an independent measurement of performance. A standardized program assists park staff who may lack experience in the commercial services offered. The program also reduces visitor complaints.

Contract Compliance Program: This program, along with the Operational Performance Program, provides the Service a valuable yardstick in determining whether a concessioner is truly satisfactory to the extent of meriting a statutory right of preference in contract renewal or in decisions to terminate for unsatisfactory service. The program outlines specific guidelines and procedures whereby the Park Superintendent can effectively determine, on an annual basis, the degree the concessioner is complying or not complying with the terms of his contract and/or permit.

The park is responsible for the direct execution of both the operational performance and contract compliance segments of the Review Program. The Operational Performance Program is more demanding of field time than any other aspect of concessions. Approximately 1,400 individual inspections are needed annually for 478 concession operations within the National Park System and conservatively, 10,000 work-days per year are spent in conducting those inspections.

Each evaluation may consist of anywhere from three individual evaluations of a concessioner with a single facility to over 400 individual evaluations on a multifacility. Every concessioner is annually reviewed on at least a limited basis.

A program is underway to update all standards used in the evaluations. These reviews are being conducted with active participation by the concessioners who operate the particular service. In addition, other avenues are being explored to increase concessioner involvement in interpretive and visitor service activities, as mentioned in Points #3 and #11 of the Director's 12-Point Plan, without decreasing the Service's involvement.

The workload required for the Contract Compliance Program depends on the terms and conditions stated in the concessioners' contract and/or permit. A review could require weeks. This review is a result of numerous hours spent throughout the year in reviewing contract requirements on site for every authorization.

4. Approving rates charged to the public for services offered based on comparability as defined by law.

Field personnel are required to approve concessioner rates in accordance with the NPS Rate Approval Program. The program assures that rates are comparable with those charged in the private sector and provides uniformity among parks. A simple operation may require a few hours to complete a rate approval study, but a complex operation with multiple services and levels of services and accommodations may take weeks to complete. Generally, each concessioner's rates are approved once a year and in some cases, more than once a year, depending upon economic conditions. It is estimated that 2,500 work days are spent on conducting rate approvals each year, generally by park personnel.

Park Management/Concessions Management

5. Integrating planning and contracting processes to ensure proper level and quality of services rendered.

   Concession planning is usually conducted as part of General Management Plans and Development Concept Plans. The planning effort will establish the parameters for what is necessary and appropriate relative to concession operations. It is essential that the planning and the contracting processes are integrated to assure that only necessary and appropriate facilities and services are provided for in the contract and that they parallel that of the planning documents. In addition, the planning process will focus on concessioner interpretation as a way to assist the visitor's understanding of the park.

6. Analyzing financial data pertaining to concession activities including sales and franchise fees.

   Approximately 478 concessioners submit annual financial statements (balance sheet, income statement, etc.) which show the results of their operations. The financial statements are analyzed to ensure that the information submitted conforms to our requirements. In analyzing the financial statements, unusual increases or decreases are identified and investigated; computation of the franchise fees due the Government and the exclusions taken are verified and the various operating expenses are compared to determine if they are in line with industry figures. Summary data, such as total sales, franchise fees, and net income are compared with prior years to indicate various operating trends. For example, in 1984, concessioners had gross sales of about $362 million or a 6 percent increase from 1983 sales of about $340 million. Approximately 3 staff-years are expended in this area.

7. Providing economic analysis consistent with contracting and planning needs.

   Pursuant to law, concessioners must have a reasonable opportunity to make a profit on their operations. Therefore, concession contracts, including length of contract, franchise fee, and required investment must be based on clear and realistic assessment of the economics of each situation. Concession related concepts contained in General Management Plans and Development Concept Plans must be economically viable if a park plan is to become a reality. Good planning makes possible maximum concessioner expenditures for life safety, rehabilitation and modernization, and prevents establishment of marginal operations with attendant problems of quality and service.

   Depending on the size and complexity of a project, most concession planning and economic feasibility studies are conducted through the Branch of Concessions, Denver Service Center, but may be conducted at the Washington, Regional, or park levels. Approximately 6 staff-years are devoted to this activity.

8. Training of concessions personnel.

   To meet the diversity of training needs of both NPS and concessioners and to continue with the spirit of a team relationship, as outlined in Point #11 of the Director's 12-Point Plan, various ongoing training programs are conducted which are attended by both NPS personnel and concessioners. Concessioners attend at their own expense. Concessions training involves development and execution of a program to provide concession-related skills to line management and staff whose duties so require on either full-time or collateral basis. It also involves cross-training with safety and public health service personnel to ensure that these closely related disciplines function with concessions in a coordinated manner. The program also encompasses development of policy concerning concessioner training of their own employees in NPS orientation subjects. The program also provides central management and assignment of cooperative education students with particular emphasis on Historically Black Colleges. Training provides park management those skills which are outside their normal experience, but which are required to effectively implement the Concessions Management Program. Training provides concessioners with an understanding of the Service's roles and missions.

9. Protecting the best interest of the public through effective concession contracting and overview of the nationwide Concessions Program.

Through the continuous overview of the nationwide Concessions Program, contracts and permits are maintained at a consistent level of uniformity to assure conformity with Public Law 89-249, but yet not allowing unnecessary financial obligation to the Government. To maintain consistency with law, policies, rules and regulations, all long-term and/or high volume authorizations are reviewed for uniformity and consistency, utilizing good business sense prior to execution. In addition, policies are reviewed and updated in order to assure that the needs of the visiting public and the Service are being adequately met. As an example, Servicewide policy has been revised to identify the concessioner as "avenue of first choice" for funding of park utility systems, roads, parking areas, etc., ancilliary to their operations. A proposed policy revision would broaden the scope of concessioner maintenance responsibilities.

At the Regional and park level, the concessions staff must assure that precontracting and contract documents are written to reflect the intentions of the Service, particularly from planning documents, so that the best service to the visitor is provided at reasonable rates, and that the best concessioner is ultimately selected to provide the service under a negotiated contract.

The 87 FTE positions funded by this base program are located in Washington, D.C., Regional Offices, park offices, and the Denver Service Center Concessions Planning Office as shown below:

	Funds	FTE-T
Washington Office	$836,300	19
Regional Offices and Parks	2,391,700	59
Denver Service Center	320,000	9
Total	3,548,000	87

As of January 13, 1986, there were 478 concessioners operating in 117 park areas. The number of concessioners fluctuates from month-to-month because of frequent changes in the number of concession permits. The above figure consists of 173 concession contracts and 305 concession permits. During fiscal 1985, the Service collected franchise fees from park concessioners amounting to $7,554,000. All franchise fees paid to or due the United States are deposited in the Treasury to the credit of the National Park Service Visitor Facilities

Park Management/Concessions Management

Fund. The monies appropriated from this fund are used for the reconstruction, rehabilitation, replacement, relocation or removal of Government-owned facilities which are used by concessioners to provide food, lodging, or other services to visitors and concessioner employees.

Justification of Program and Performance

Activity: Park Management
Subactivity: Interpretation and Visitor Services

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Interpretation and Visitor Services	($)	65,119	62,319	65,119	57,413	-7,706
	(FTE-T)	(2,088)	(2,088)	(2,088)	(1,998))	(-90)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Interpretation and Visitor Services	65,119	-2,800	62,319

Mandated reductions required by P.L. 99-177 will result in a decreased number of conducted talks, guided tours, living history programs, and demonstrations conducted by staff to provide an appreciation and understanding of park resources. Fewer seasonals will be hired during the heavy visitor season, and the purchase of supplies and materials will be reduced. Hours of operation for some visitor centers and visitor contact stations will be shortened. The overall effect will be a decreased level of interpretive activity as a result of which the public will receive less information about the area they are visiting.

Authorization

16 U.S.C. 1	The National Park Service Organic Act

Objective

The objective of interpretation and visitor services in the National Park System is to make available to park visitors information, services, and programs designed: (1) to foster public understanding, appreciation and support of National Parks and their significant cultural, natural and recreational values; (2) to encourage and facilitate appropriate, safe, minimum impact use of the parks; and (3) to promote public understanding and acceptance of the Service's policies and management programs.

Base Program

The National Park Service is charged with preserving and protecting the natural, cultural, and recreational resources within the areas under its jurisdiction while at the same time allowing for public use and enjoyment. However, public use constitutes a major impact on park resources and makes the achievement of a balance between resource preservation and public enjoyment difficult. Also, while in parks, visitors are often in an unfamiliar and sometimes hazardous environment with a resulting high potential for accidents and injuries.

Ultimately, the success of any park management program depends on informed public support. The information, orientation, and educational programs provided by the National Park Service are intended to promote understanding and influence the park visitors' behavior. Interpreters provide information to park visitors, prior to and during their visit, about the options open to them while visiting the park, including information on special situations, conditions or regulations, and specific safety information regarding the particular park they are visiting. Interpretive programs also introduce visitors to the National Park Service and its mission, to the National Park System, and to the significance and value of the particular park they are visiting and the visitors' personal relationship to that resource. By making the above services available to all park visitors, visitor impact on the resource is decreased, as are visitor related accidents and maintenance, protection, and resources management problems. In many cases, interpretive programs provide the only contact visitors have with park personnel.

Personally conducted programs and services have been found to be the most effective means for imparting information and affecting visitor behavior in the parks. For that reason, the majority of services and programs available to park visitors through the interpretation and visitor services function is personally conducted by a professional staff of park rangers, naturalists, historians, archeologists, and interpretive technicians. These programs and services are specially designed to meet the above general program objectives. They include: manned information and orientation stations; information and orientation talks; general interpretive talks and evening programs; guided tours through caves, archeological ruins, historic buildings, and fragile natural resources; interpretive demonstrations; special education programs; and offsite programs and services. The National Park Service staff also provide, operate, and/or maintain a variety of nonpersonal services, facilities, and programs for park visitors. These include information and orientation publications, self-guiding trails and tours, exhibits and audiovisual presentations.

The type of interpretive programs and visitor services offered in any particular area depends upon two factors:

1. The particular park resource involved, including how much visitor use it can withstand without being damaged; and

2. The types of actual and/or potential park visitors expected, their number and their needs. Every effort is made to identify and meet the needs of all park visitors. A special effort is made to provide for the needs of physically and culturally handicapped visitors.

The base program is described in more detail as follows:

Park Management/Interpretation and Visitor Services

Base Funding
($ in thousands)

1. General information and orientation services........ [illegible] [illegible] FTE

Basic interpretation and visitor services concentrate on ensuring that park visitors have a safe and enjoyable visit, preventing visitor related resource damage, developing an appreciation of the park's values, and forming a positive relationship between park visitors and the mission of the National Park Service. The services consist of:

-- Orientation and information services provided through personally conducted talks, informal roving assignments, evening programs, uniformed personnel at visitor information stations and visitor centers, audiovisual presentations, and publications.
-- Personally conducted tours that cannot be self-guiding because of safety needs of visitors and security needs to prevent potential damage to resources (e.g., historic buildings, caves, archeological ruins, and other fragile or potentially hazardous resources open to visitors).
-- Self-guiding building tours, self-guiding trails, and exhibits.
-- Special interpretive programs provided in response to visitor interest and park management needs.

2. Demonstrations.. [illegible] ([illegible] FTE)

-- Living history programs, living farms, interpretive demonstrations and other programs utilizing the creative and performing arts, including arts and crafts exhibits. Such activities strive for historical accuracy and high professional standards in order to present a realistic interpretation of historical events. This type of program enhances the experience of the park visitor and underscores the importance of the park's resources.
-- Demonstration or teaching to park staff of recreation skills, with particular emphasis on safety, emergency preparedness, and minimal resource impacts, for those activities which are relevant to the resources of the area.

3. Formal education activities................................ [illegible] ([illegible] FTE)

-- In-park, resource-based activities involving school children, other education groups, and teachers using park study areas and other facilities to effectively enhance understanding of critical resource issues and increase appreciation of the educational role of National Park Service resources.
-- Offsite programs given at schools and community organization facilities near parks to expand the role and involvement of citizens at all levels in the National Park System.

4. Harpers Ferry Center.. [illegible] ([illegible] FTE)

Located in Harpers Ferry, West Virginia, this interpretive design center is responsible for the design and construction of audiovisual programs, museum and wayside exhibits and traveling exhibits and shows. The Center is also responsible for the publication of posters, handbooks, and park folders (funded under the Informational Publication Budget subactivity). The

[illegible]

[illegible]

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Park Management/Interpretation and Visitor Services

	Base ($000's)
Capitol Hill concerts	292
Support for concerts	49
Wolf Trap program support	171
Wolf Trap stagehands	438
Ford's Theatre program support	195
Ford's Theatre ushers	24
Carter Barron program support	34
Television coverage for the July 4th concert	244
Total	1,447

Decrease for 1987	1987 Base	1987 Estimate	Decrease
($)	65,119	57,413	-7,706
(FTE-T)	(2,088)	(1,998)	(-90)

The total request for Interpretation and Visitor Services is $7.7 million less than the fiscal 1987 base as a result of the Service's proposal to fund the Exhibit Preservation and Rehabilitation Program and the operation of visitor transportation systems from the "Operation of the National Park System-Fee Programs" appropriation under proposed legislation. This will result in a transfer of $7,964,000 and 98 FTE's to the new account. Other changes include increases to support the anticipated additional demands which will be placed upon three park areas due to activities connected with the Bicentennial of the United States Constitution and the soon-to-be-completed restoration of the Statue of Liberty and Ellis Island complex through funds donated by the American public.

	Amount	FTE
Castle Clinton National Monument and Ellis Island National Monument Operations.................	$161	8
United States Constitution Bicentennial-Independence National Historical Park.........................	97	--
Transfer of Harpers Ferry Center Exhibit Preservation and Rehabilitation Program to proposed "Operation of the National Park Sytem-Fee Programs" account..................................	-3,962	-98
Transfer of In-park Transportation Systems Program to proposed "Operation of the National Park System-Fee Programs" account.......................	-4,002	--
Total, Increases and Decreases	-7,706	-90

1. Provide additional interpretive services at Castle Clinton National Monument and Ellis Island National Monument.......................... $161 8 FTE

Ellis Island National Monument $134 6 FTE

In an unprecedented effort, funds are being raised through private donations for restoration of the Statue of Liberty and several historic structures on Ellis Island. Portions of this project are scheduled for completion in 1986. The target level of $250 million will provide needed repairs to the Statue and restoration of the Main Building and Powerhouse on Ellis Island, involving 300,000 square feet of interior space. The Ellis Immigration Museum, containing approximately $3 million in artifacts, will be housed in the Main Building. Annual visitation for Ellis Island is anticipated to reach 1.4 million. An interpretive staff is required on the island to orient the visitor and assure protection of the newly restored resources. During the summer months, the period of heaviest visitation, short tours conducted by the staff would provide a historical orientation for first time visitors. In the less crowded off-season, longer tours would be available to acquaint those interested with a fuller understanding of the resource. Interpretive staff will also assist in operating the Island's two theaters.

Castle Clinton National Monument	$27	2 FTE

Castle Clinton, located in Battery Park, New York City, has been designated the mainland visitor center and departure staging area for the estimated 2.5 million visitors waiting to board passenger boats for the trip to the Statue of Liberty and/or Ellis Island. Current annual visitation at Castle Clinton is approximately 120,000. While it is difficult to estimate how many of the Statue of Liberty/Ellis Island visitors will enter Castle Clinton while waiting to board a tour boat, or after disembarkment, visitor services staff must be available during the heavy visitation season from May through September to accommodate visitors requesting information on boat schedules and visitation conditions on Liberty and Ellis Islands and seeking other kinds of assistance. The two full-time equivalencies requested will provide four seasonal park technician positions to meet Liberty and Ellis Islands' visitor needs at Battery Park.

2.	Provide additional interpretive services at Independence National Historical Park to support activities associated with the United States Constitution Bicentennial Celebration....................	$97	-- FTE

The Bicentennial of the Constitution of the United States will occur in 1987, and Independence National Historical Park has been selected to serve as the focal point of the celebration. Annual visitation at the park is expected to double to over 10 million, and special events will have to be accommodated. This request would provide additional interpretive services to handle the increased demand during the year of the Bicentennial Celebration.

3.	Transfer of Visitor Transportation Systems ($4,002, -- FTE) and Harpers Ferry Center Exhibit Rehabilitation Program ($3,962, 98 FTE)..........	$7,964	-98 FTE

Under proposed legislation, these programs will be funded from the projected $59 million in recreation fee revenues under the "Operation of the National Park System-Fee Programs" account.

Park Management/Interpretation and Visitor Services

Distribution of decrease by object class:

	FTE	Amount
Personnel services	-90	-$2,036,000
Personnel benefits		-236,000
Travel and transportation of persons		-8,000
Transportation of things		-24,000
Other services		-450,000
Supplies and materials		-700,000
Equipment		-250,000
Rent, communications and utilities		-3,000,000
Printing and reproduction		-1,002,000
Total		-7,706,000

Justification of Program and Performance

Activity: Park Management
Subactivity: Visitor Protection and Safety

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Visitor Protection and Safety	($)	81,220	77,728	82,195	76,361	-5,834
	(FTE-T)	(2,804)		(2,804)	(2,512)	(-292)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Visitor Protection and Safety	81,220	-3,492	77,728

As a result of the mandated P.L. 99-177 reduction, there will be fewer contacts between Park Service personnel and the visiting public participating in recreational activities as fewer seasonals will be hired during the peak periods of visitation. There will be a reduced frequency of patrol, especially in the backcountry, although protection of the park visitor and park resources will remain a top priority and continue to be accomplished at an adequate level. Vehicle use will be curtailed and non-mandatory program-related training will be eliminated. Whenever possible, reductions will be taken in areas where the direct safety of the visiting public and park employees will not be jeopardized.

Authorization

16 U.S.C. 1, and 16 U.S.C. 1a-6

Objectives

To provide for the security and protection of park visitors, employees, and the property and resources of the National Park System.

Base Program

The dual mission of the National Park Service is to protect and preserve for future generations areas of national significance while providing for their use and enjoyment today. Visitor protection and safety activities are essential to the accomplishment of this mission. They provide for the security of the park visitor and his belongings, the protection of park facilities and resources, and the safety of park personnel. As more and more visitors seek to enjoy the diverse areas and attractions of the National Park System, the Service's responsibilities in ensuring a safe, secure park environment have grown more numerous and complex. These responsibilities include law enforcement and traffic control, emergency preparedness, search and rescue, supervision of visitor recreation, issuance of permits and collection of recreation fees, and occupational safety and health.

Law enforcement and protection activities include visitor, facility and resource protection, criminal investigations, patrol, apprehension and arrest, crowd control, special security, drug and vice control and visitor assistance.

Park rangers with formal law enforcement training perform the full range of professional law enforcement functions throughout the National Park System with the exception of the metropolitan Washington, D.C. area and two large urban parks (Gateway National Recreation Area in New York and Golden Gate National Recreation Area in San Francisco), where the U.S. Park Police carry out these responsibilities.

Of the total base program for visitor protection and safety, $26.8 million supports the U.S. Park Police operations Servicewide, including 635 FTE's. Base dollars and total staffing for all other activities associated with safety and protection of resources, park visitors and staff are $55.4 million and 2,169 FTE's.

The fiscal 1986 base program for Visitor Protection and Safety is described as follows:

Occupational Safety and Health Management	$3,815	123 FTE

The objective of Occupational Safety and Health management is to provide an environment free of recognized hazards to safety and health in which persons may work or recreate without undue fear of injury, illness, or property damage. The demands for this activity have increased as numbers of visitors increase and technological changes create new occupational hazards and recreational opportunities.

Safety and health activities include developing and coordinating guidelines and requirements, and inspecting, evaluating, and monitoring of work areas for hazards such as noise, toxic gases, or vapors. Critical functions include life safety evaluations of park facilities, visitor use areas, emergency preparedness programs, and motor vehicle operations. Program specialists are sent to specific parks to monitor, evaluate and help institute necessary changes where hazards are present.

Emergency Services	$3,503	128 FTE

The Service programs funds to maintain minimum levels of preparedness to respond to emergency situations. These funds provide the staffing, equipment, supplies and materials for structural fire suppression, emergency medical treatment and, where necessary, ambulance services.

Traffic Control..	$3,117	110 FTE

This activity consists of the safe direction of both vehicular and pedestrian traffic on park roadways and parking areas, including investigation of motor vehicle accidents and boating accidents. There were 8,018 motor vehicle accidents investigated in 1985.

Park Management/Visitor Protection and Safety

Search and Rescue .... $1,443 52 FTE

Search and rescue involves searching for lost, stranded, ill, or injured persons, and effecting their rescue. In 1984, the Service responded to 2,364 search and rescue incidents involving 2,694 visitors.

Patrol and Enforcement .... $50,209 1,561 FTE

This function involves vehicular, foot, and horse patrols to deter or detect illegal activity and, if necessary, apprehend the violators. Normal activities include monitoring boundaries, intersections, roads, illegal hunting locations, etc.; checking the security of structures and facilities; issuance of citations or warnings for traffic violations resource protection, and other offenses; administrative functions including the planning, organizing and supporting of patrol and enforcement; training and equipping personnel; arrest of violators; temporary incarceration; vandalism control; and crime prevention through visitor contact and literature distribution. In 1984, the Service issued 80,963 citations or warnings for moving motor vehicle and boating traffic violations. Reported felonies totalled 6,612, a decrease of 13.2 percent from 1983. Eighty seven percent of these were crimes against property (larceny, burglary, arson and motor vehicle theft).

Criminal Investigations .... $3,166 113 FTE

The goal of this activity is to identify and bring the perpetrator before the criminal court for trial. Investigations can encompass all violations of laws and regulations that the Service is authorized to enforce. This includes part I (homicide, rape, robbery, assault, burglary, larcency, motor vehicle theft and other felonies) and II offenses (drug, misdemeanors and petty offenses) and serious traffic infractions. Activity functions include, but are not limited to, protecting the crime scene; collecting, identifying, maintaining documented chain-of-custody, processing and interpreting physical evidence; and courtroom testimony.

Visitor Recreation Supervision .... $10,821 410 FTE

This activity includes providing services to visitors using recreational facilities or participating in recreational activities on park property. Park personnel are stationed at principal recreation areas such as beaches, take off points for mountaineering and caving, boat launch areas, trailheads, campgrounds, horseback riding areas, ski areas, and other locations. Recreational users are informed of the proper use of facilities and equipment intended for the enjoyment of these areas.

Fee Collection Activities .... $6,121 307 FTE

Entrance fees ranging from $1 to $3 per vehicle ($.50 to $1.50 per person at walk-in parks) are charged in 63 units of the System. Annual admission permits are also available for $10 which permit unlimited access to fee areas. In addition, the Service collects user fees for special services available to visitors such as guided tours, transportation systems, cabins, and campgrounds. The revenues generated through these fees are currently deposited in the Land and Water Conservation Fund. However, the Service is proposing legislation for 1987 which will result in the deposit of recreation fee revenues into a special Treasury account, "Operation of the National Park System-Fee Programs." These revenues would then be available for use by the

Service in 1987 to finance a variety of Servicewide programs, including fee collection costs. Base funds and staff for this program would be transferred to the "Operation of the National Park System-Fee Programs" account. A summary of fee revenues is shown below.

Recreation Fee Revenues

(dollar amounts in thousands)

	FY 1983	FY 1984	FY 1985
Daily entrance	$8,639	$8,240	$8,011
Annual admission	1,227	1,167	1,125
Campground fees and other special user fees	11,057	11,673	11,782
Total	20,923	21,080	20,918

The Service currently operates a campground reservation system in nine areas. This system, inaugurated in 1978, covers 3,420 sites in 21 campgrounds located in the following parks:

Acadia National Park
Cape Hatteras National Seashore
Grand Canyon National Park
Great Smoky Mountains National Park
Joshua Tree National Monument
Rocky Mountain National Park
Sequoia-Kings Canyon National Parks
Shenandoah National Park
Yosemite National Park

Reservation outlets are also located in the Western, Southeast, Mid-Atlantic, and Rocky Mountain Regional Offices as well as the Washington Office of the National Park Service. The system is operated by Ticketron Corporation which charges a handling fee for each reservation.

Campground Reservation System

	FY 1983	FY 1984	FY 1985
Number of areas	7	8	9
Campsites	2,900	3,300	3,420
Reservations	105,000	107,000	110,000
National Park Service Operating costs	$421,200	$435,000	$445,000

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	82,195	76,361	-5,834
(FTE-T)	(2,804)	(2,512)	(-292)

The total request for Visitor Protection and Safety is $5.8 million less than the fiscal 1987 base due to the Service's proposal to fund fee collection costs from the "Operation of the National Park System-Fee Programs" appropriation proposed under new legislation. As a result, $6,121,000 and 307 FTE's will be transferred to the new account. Other changes include increases for Castle

Park Management/Visitor Protection and Safety

Clinton National Monument, Ellis Island National Monument, and Independence National Historical Park to support additional requirements beginning in 1987.

	($000's)	FTE
Castle Clinton National Monument and Ellis Island National Monument operations......................	242	15
United States Constitution Bicentennial-Independence National Historical Park........................	45	--
Transfer base funding for fee collection to "Operation of the National Park System-Fee Programs" account..	-6,121	-307
Total, increases and decreases..............	-5,834	-292

1. Provide additional visitor and resource protection to support activities at Ellis Island National Monument and Castle Clinton National Monument — $242 — 15 FTE

Ellis Island National Monument	$126	8 FTE

A fundraising effort is expected to provide over $250 million for needed repairs and restoration of the Statue of Liberty and Ellis Island immigration buildings. The fundraising coincides with the Centennial of the Statue, which will take place in 1986. Annual visitation for Ellis Island is estimated at 1.4 million. In addition, assorted ethnic festivals are scheduled in and around the island's 33 historic structures to mark renewed interest in America's ethnic heritage. To safeguard the visitors and the huge investment in resources, comprehensive patrol and fire/security system monitoring will be required on a year-round, 24-hour-a-day basis. This increase will allow Ellis Island to be operated on a minimally acceptable level to ensure protection of both the visitor and the park resources.

Castle Clinton National Monument	$116	7 FTE

Castle Clinton has been designated as the mainland visitor center and departure staging area for the anticipated 2.5 million annual visitors waiting to board passenger boats for the trip to the Statue of Liberty and for Ellis Island. Annual visitation at Castle Clinton is presently 120,000. At the current staffing and funding levels the park will not be able to adequately control the expected crowds, provide emergency services, or ensure the protection of visitors and park property. The proposed increase will augment staffing levels during the peak visitor season.

2. Provide additional staff support for visitor and site protection during the celebration of the Constitution Bicentennial at Independence National Historical Park — $45 — — FTE

The proposed increase will provide additional temporary staff and support costs to handle the expected increase in visitation at the park during the 1987 celebration. The park expects visitation to double and has planned to keep facilities opened an additional 600 hours during the course of the year. Numerous special events have also been scheduled, which will require additional staff for crowd and traffic control and protection of park property.

3. Transfer of fee collection activities -$6,121 -307 FTE

Under proposed legislation, the cost of collecting recreation fees will be funded from the estimated $59 million in recreation fee revenues under the "Operation of the National Park System-Fee Programs" account.

Distribution of decrease by object class:

	FTE/T	Amount
Personnel services	-292	-$4,937,000
Personnel benefits		-365,000
Travel and transportation of persons		-4,000
Transportation of things		-1,000
Other services		-135,000
Supplies and materials		-392,000
Total		-5,834,000

Justification of Program and Performance

Activity: Park Management
Subactivity: Maintenance

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Operational Maintenance	($)	186,842	--	186,842	190,752	+3,910
	(FTE-T)	(4,792)		(4,792)	(4,822)	(+30)
Cyclic Maintenance Program	($)	18,419	--	18,419	18,419	--
	(FTE-T)	(--)		(--)	(--)	(--)
Repair and Rehabilitation Program	($)	30,530	--	30,530	21,376	-9,154
	(FTE-T)	(--)		(--)	(--)	(--)
Servicewide Programs	($)	3,279	--	3,279	3,279	--
	(FTE-T)	(10)		(10)	(10)	(--)
Total Requirements	($)	239,070	228,788	239,070	233,826	-5,244
	(FTE-T)	(4,802)	(4,802)	(4,802)	(4,832)	(+30)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Maintenance	239,070	-10,282	228,788

Reductions mandated by P.L. 99-177 will result in the hiring of fewer seasonal employees to perform maintenance duties and increase the length of time that permanent positions are left vacant. Lower priority cyclic maintenance and repair and rehabilitation projects will be deferred, and the purchase of some equipment will be delayed or eliminated. Purchases of supplies and materials will be deferred and the frequency of routine maintenance, such as grass mowing, litter and trash collection, custodial service, and trail and road maintenance, will be reduced.

Authorization

16 U.S.C. 1

Objective

To conduct a professional program of preventive and rehabilitative maintenance, and to provide for a safe, sanitary, and aesthetically pleasing environment for park visitors and employees.

Park Management/Maintenance

Base Program

1. Operational Maintenance.............................. $186,842 4,792 FTE

The Service is required to maintain and protect the facilities and equipment essential to the operation of the National Park System. The facilities are of all ages and vary in complexity from simple one room cabins to extremely complex utility systems.

The Service's operational maintenance program is intended to meet the routine daily needs of individual parks. Typical work performed under this program includes: operating large water and sewer systems, repairing buildings, grading and patching roads, removing snow, repairing fixed and moveable equipment, maintaining trees and grounds, providing janitorial and custodial service, and purchasing commercially provided utilities (i.e., electrical power, water, sewer and fuel) and small equipment. Funds are also programmed at the Regional level for the timely replacement of capitalized equipment.

The scope and frequency of the work performed in this category are determined by local park management needs and professional maintenance personnel at both the park and Regional level who are guided by State and local regulations, national building codes, and Federal standards. Most of the work is performed by park personnel or through locally administered contracts.

2. Cyclic Maintenance.................................... $18,419 -- FTE

Cyclic maintenance is defined as specific maintenance activities performed on a fixed periodic basis when the work is predictable and the cycle is longer than once a year. Programs for cyclic maintenance are based on functional inventories and accumulated project lists developed on a specific park-by-park basis. Projects undertaken in this program are performed as often as once in every 2 years and as infrequently as once in every 10 years. The type of resource or facility, its importance to park management and visitor accommodation, its age, and other factors determine the frequency that cyclic maintenance is performed. Typical examples of cyclic maintenance projects include road resealing, repainting and reroofing of buildings, trail brushing, and sign replacement and repair. The work performed may require the preparation of minimal design and specifications prepared by engineers, architects, or landscape architects. The Cyclic Maintenance Program is managed by the Regional Offices. The work is usually performed by day labor or contract under the supervision of park staff.

In response to concerns outlined in Senate Report 99-141, the Service has taken several actions designed to improve the management of the Cyclic Maintenance Program. Specifically, criteria for eligible projects have been reissued to all Regional Offices. More comprehensive guidelines and instructions for development and execution of the program are in the process of being updated to ensure consistency and better program management. Each Region has been directed to examine requirements over a 10-year cycle to more closely reflect true cyclic maintenance needs. The amount identified for cyclic maintenance in the 1987 base represents a more accurate estimate of the program as currently constituted.

Park Management/Maintenance

3. Repair and Rehabilitation Program.................... $30,530 -- FTE

Repair and rehabilitation projects correct deficiencies in buildings, roads, utility systems, and employee quarters that do not require major rehabilitation or reconstruction. The projects programmed under this category are usually based on formal inspections conducted by qualified personnel and are nonrecurring in nature. Typical projects include campground and trail rehabilitation, road repair, sewer and waterline replacement, and rewiring of buildings. Some minimal planning and design is often required. The program is administered by maintenance professionals in the Regional Offices or in the parks. Actual work is usually performed by contract under the supervision of park maintenance staff. A new listing of projects is generated each year to support the requested funding level.

The base program for fiscal years 1982-1985 placed a high priority on the restoration and repair of deteriorated visitor use facilities through the Park Restoration and Improvement Program (PRIP). Responding to studies by the General Accounting Office detailing the deterioration of facilities, particularly in many of the popular older parks, the Service initiated PRIP to begin remedying the serious health and safety deficiencies which were an outgrowth of the System's age, rapid expansion, and increasingly heavy visitor use.

In 1985, the National Park Service initiated work on a maintenance management system designed to improve the planning and performance of maintenance activities in the parks. This action, taken at the direction of Congress and in response to a 1984 General Accounting Office study, will provide a framework for assuring efficient and effective maintenance management of park physical assets and will also permit a systematic linking of maintenance needs, based on an analysis of workload inventory and work standards, to funding requests. A contract for maintenance management implementation in the National Capital Region has been awarded. A Servicewide contract covering maintenance management implementation in the remaining nine Regions is to be awarded prior to May 1986. The contract will be completed in phases over a 3-year period beginning in 1986.

Within the Repair and Rehabilitation Program, funds were provided in 1986 to accommodate the following congressional add-ons:

	Amount (000's)
Delaware Water Gap National Recreation Area	$100
Allegheny Portage Railroad National Historic Site	46
New River Gorge National River	150
Glen Canyon National Recreation Area	600
Grand Canyon National Park	250
Yosemite National Park	400
Saguaro National Monument	150
Jean Lafitte National Historic Park and Preserve	157

Base funds identified for repair and rehabilitation in 1987 reflect a more accurate assessment of the program's annual requirements based upon an examination by the Service of the Regionally managed program.

Under proposed legislation, a portion of this program is proposed for funding from the $59 million in the "Operation of the National Park System-Fee Programs" account.

4. Servicewide Programs.................................. $3,279 10 FTE

Base funding for Servicewide maintenance activities covers the following special activities which have Servicewide applicability:

a. Dam Safety Program................................ $400 1 FTE

This program provides for mandated (Public Law 92-367) inventories and inspections of dams located within or adjacent to National Park System units. Funds are also programmed to develop emergency action plans and to outline management responsibilities for the preservation/maintenance, operation and safety of these structures. Currently, the Service has inventoried 389 (263 NPS and 126 non-NPS) dams, located within or immediately adjacent to park boundaries, that are classified as affecting park safety or operations.

Through an agreement with the Bureau of Reclamation, 22 significant hazard potential dams under NPS management will receive formal safety inspections every 5 years. The Bureau will also follow up with detailed premodification studies for those dams requiring major rehabilitation. Informal inspections will also be performed on other NPS dams by Regional staff to evaluate maintenance and operational conditions on an annual basis. The Service performs corrective action as recommended from these inspections through the Regional Office administered Repair and Rehabilitation Program or other funding sources as appropriate.

In addition to inventories and inspections, formal training is provided for Regional program coordination and inspections, and a computerized inventory of NPS and non-NPS dams is maintained.

b. Servicewide Maintenance Program Overview.......... $2,351 -- FTE

The Service undertakes numerous surveys, studies, and analyses utilizing both Washington Office staff and contractual agreements that assess the progress of and recommend improvements to the maintenance programs of the National Park Service. Programs which are Servicewide in nature and have a potential for broad application are emphasized. Funds are used for developing solutions to common maintenance problems, training programs, and other programs of a Servicewide nature.

Also included is Servicewide management of radio systems, including radio frequency assignment, radio system maintenance and design of replacement systems; Servicewide utility system monitoring and utility negotiations.

c. Energy Conservation Program...................... $528 9 FTE

The Energy Policy and Conservation Act of 1975 (P.L. 94-163) requires all Federal agencies to report their energy consumption and costs to the Department of Energy, and hence to the Congress and the President. The National Energy Conservation Policy Act of 1978 (P.L. 95-619) requires all Federal agencies to retrofit all of their owned buildings by 1990. The base funds support the salary and related management costs of energy program coordinators at the Washington and 10 Regional Offices.

The Servicewide and Regional Energy Program Coordinators provide technical expertise and assistance for the identification of projects, project cost-effectiveness analysis, and oversight of project installation. They also manage the energy data reporting functions mandated by P.L. 94-163 and Department of Energy regulations. In addition, the Washington Office Energy Program Coordinator serves as the Bureau Energy Manager, required by the Department (752 DM 3.1). This individual serves as the liaison with the Department and as the NPS representative on the Departmental Energy Conservation Committee which recommends Departmental policy.

Energy retrofit projects are funded from Regional maintenance programs. The need and relative priority of these projects are detemined by each Region as part of its overall maintenance program.

The Energy Conservation Program achieved greater efficiency in the operation of the National Park Service by improving energy utilization (in BTU/GSF) by 15 percent from 1975 to 1985. In support of Point 12 of the Service's 12-Point Plan, to foster more efficiency in the management of the National Park Service, the Energy Program will be pursuing an additional 10 percent improvement by 1990.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
($)	239,070	233,826	-5,244
(FTE-T)	(4,802)	(4,832)	(+30)

The total request for Maintenance is $5.2 million less than the 1987 base due to the Service's proposal to fund a portion of the Repair and Rehabilitation Program from the "Operation of the National Park System-Fee Programs" appropriation under proposed legislation. This will result in the transfer of $9,154,000 to the new account. Other changes include increases to support additional requirements at four park areas as a result of planned special events or necessary emergency actions.

	(000's)	FTE
Castle Clinton National Monument and Ellis Island National Monument operations......................	2,914	30
United States Constitution Bicentennial- Independence National Historical Park.........................	211	--

Park Management/Maintenance

Provide maintenance funding for special requirements at two park areas..................................	785	--
Transfer Repair and Rehabilitation Program funding to Operation of the National Park System-Fee Programs account..................................	-9,154	--
	-5,244	30

1. Provide Additional Operational Maintenance to Support Castle Clinton National Monument and Ellis Island National Monument Operations........................ $2,914 30 FTE

Ellis Island National Monument $2,799 27 FTE

The centennial celebration of the Statue of Liberty in 1986 will be the culmination of a remarkable effort to raise over $250 million from private donations for the repair and restoration of the Statue of Liberty and the creation of the Ellis Island Immigration Museum. Annual visitation to the restored structures on Ellis Island is projected at 1.4 million.

This increase will provide funds and staff to maintain the electrical, sewage, water, and HVAC systems, including operation, emergency repair, and preventive maintenance. NPS staff will monitor the utility systems around the clock and a service contract, with an annual cost of $323,000, will provide major maintenance and emergency service for the systems. Annual utility costs for electricity are estimated at $1,230,000. An additional $130,000 is required for water, sewage, and waste service from Jersey City, New Jersey. The increase will also provide $500,000 for the purchase of a work boat to transport staff and supplies to the island on a 24-hour-a-day basis throughout the year. The increase in staff is required to maintain the restored buildings and protect the resource, as well as the public's investment. The staff will provide routine maintenance for both Liberty and Ellis Islands on a year round basis.

Castle Clinton National Monument $115 3 FTE

Castle Clinton has been designated as the mainland visitor center and departure staging area for the anticipated 4.5 million annual visitors waiting to board passenger boats for the trip to the Statue of Liberty and Ellis Island. The only restroom facilities available in the vicinity of the staging area are at Castle Clinton. The Service anticipates that a large number of visitors waiting to board passenger boats will use Castle Clinton as a rest area thereby adding to the present workload for grounds and building maintenance. The proposed increase will provide additional seasonal staff and funds to cover this workload.

2. Provide Additional Operational Maintenance to Support Activities at Independence National Historical Park Associated With The United States Constitution Bicentennial Celebration........................... $211 -- FTE

The bicentennial of the Constitution of the United States will be observed in 1987, and Independence National Historical Park has been selected to be the focal point of the celebration. Annual visitation at the park is expected to at least double from its present level of 5 million, and special events will have to be accommodated. Park operating hours will be expanded for the year long celebration. The increase requested would provide additional overtime for existing personnel and increased janitorial service, trash disposal, resodding, and planting of shrubbery.

3. Provide funding to meet special requirements at two park areas......................................	$785	-- FTE
Yosemite National Park	$700	-- FTE

The Service has permanently closed down operation of the Yosemite hydroelectric plant which has been the source of power to the park and the concessioners. The decision to close the plant was due to the antiquated condition of the structure which posed a severe safety hazard. Power must now be purchased from Pacific Gas and Electric. The proposed increase will provide funding to pay for the electricity necessary for park operations.

Golden Gate National Recreation Area	$85	-- FTE

Due to the unsafe condition of the structure, the Service intends to close the Haslett Warehouse at Golden Gate National Recreation Area with the intention to offer the building for lease and development through the Historic Structures Leasing Program. Until such a time when the rehabilitation and leasing of the structure is complete, an annual amount of $85,000 is required to maintain a minimum maintenance effort and to provide adequate security measures for the "mothballed" warehouse. Previously, these expenses were paid from revenues generated through the rental of commercial space in the building.

Distribution of increase by object class:

	FTE	Amount
Personnel compensation	+30	+$642,000
Personnel benefits		+67,000
Transportation of things		+14,000
Rent, communications, and utilities		+2,063,000
Other services		-8,661,000
Supplies and materials		+85,000
Equipment		+546,000
Total		-5,244,000

Justification of Program and Performance

Activity: Park Management
Subactivity: Resources Management

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Cultural Resources Management	($)	42,973	--	42,973	38,640	-4,333
	(FTE-T)	(943)		(943)	(958)	(+15)
Natural Resources Management	($)	52,668	--	52,668	47,797	-4,871
	(FTE-T)	(904)		(904)	(921)	(+17)
Total Requirements	($)	95,641	91,528	95,641	86,437	+9,204
	(FTE-T)	(1,847)	(1,847)	(1,847)	(1,879)	(+32)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Resources Management	95,641	4,113	91,528

Natural Resources Management activities fall into four general categories:

- -- management actions to protect or enhance specific park general resources;
- -- research related to a natural resource management issue;
- -- monitoring to determine changes in the condition of resources that may require research or management actions; and
- -- acquisition of baseline data on the types of resources found in each park unit and their condition.

As a result of the cancellation of budget authority mandated by P.L. 99-177, a number of natural resource management, research, monitoring, and data collection activities will be postponed. Six or seven Regions will have to postpone certain high priority natural resource activities in fiscal 1986 as a result of Gramm-Rudman reductions in the Natural Resources Preservation Program. Specific projects postponed are likely to include: an ecosystem survey at Congaree Swamp; restoration of oak savanna at Indiana Dunes; a study of bat population decline at Carlsbad Caverns; efforts to protect endangered plants at Zion National Park; and a shoreline erosion study at Assateague Island. Reductions from other funding sources are likely to result in the postponement of planned prescribed fires; monitoring; visitor carrying capacity studies; programs to eliminate exotic species or restore extirpated native species; and studies to determine management actions needed to respond to specific threats to water quality or quantity, wildlife, vegetation, erosion, air quality or other natural resource values.

Park Management/Resources Management

Authorization

16 U.S.C. 1

Objectives

To conserve and perpetuate the cultural and natural resources of the National Park System for the enjoyment and appreciation by this and future generations. Points 1, 4 and 7 of the 12-Point Plan are essential elements that are incorporated into the Natural and Cultural Resources Management Programs. The long-range strategy to protect these resources being developed (Point 1) is fundamental to systematic and effective resource management programs. However, effective programs contain other essential components. First, they must incorporate activities that enable the parks to strike the balance between visitor use of resources and protection of those resources called for under Point 7. Second, they must include the interpretive and other activities called for under Point 4 that enable the Service to educate the public on critical resource issues. And finally, they must demonstrate leadership in planning, design, and maintenance of these resources.

Base Program

Cultural Resources Management

The Cultural Resources Management Program of the National Park Service encompasses a broad range of activities conducted to inventory, evaluate, preserve, and maintain historic, ethnographic and prehistoric sites, structures and collections of objects in such a way as to perpetuate their existence and to provide for their appreciation and understanding by the public.

Cultural resources in the Park System are diverse, fragile, and subject to deterioration because of the impacts of environmental conditions, adjacent land uses, air pollution, normal aging, and heavy visitor use. Cultural resources include such items as prehistoric ruins and mounds, fortifications, canals, mansions, barns, industrial buildings, log cabins, monuments, museum objects (both cultural and natural history), boats, wagons, tombstones, and battlefields which require preservation for the long-term protection of the resources. The Service manages over 13,000 culturally significant structures, an estimated 10 million objects, and, as yet, an unknown number of archeological sites. Yet in many cases, little is known about the resources or how to ensure their protection. The Service has an active long-term program to identify and assess the condition of its extensive holdings.

Cultural resources management involves two major functions:

1. Resources Basic Inventory. The purpose of this activity is: to locate, describe and inventory the parks' cultural resources and to define and evaluate their historical and cultural significance. The development of these evaluative inventories and significance studies meets the following management requirements:

   a. Establishes managerial accountability for the cultural resource base of the park.

b. Provides the basic information necessary for park facility planning and development proposals, including information necessary to comply with environmental and historic preservation mandates.

c. Provides the basic information to determine appropriate and cost-effective strategies to manage, preserve, and maintain the cultural resources of the System; and to accurately interpret the resources to the public.

Cultural resources specialists at the Regional Offices, in the parks, and in the Denver Service Center carry out this activity. The principal specialists are curators, anthropologists, archeologists, historians, and hitorical architects. Contract work is frequently used to augment inhouse staff or to acquire special expertise.

Work includes field surveys to discover, record, and determine the cultural associations of ethnographic resources and archeological sites; history studies to determine the significance of historic period sites and structures; historic structures surveys to determine resource condition and preservation needs; and cataloging of park collections to provide basic managerial accountability.

The Service has several basic inventory systems. They are:

a. Cultural Resources Management Bibliography. A centralized inventory of reports that address park cultural resources.

b. The List of Classified Structures. A centrailized inventory of all historic and prehistoric structures having archeological, historical, and/or architectural/engineering significance.

c. The Cultural Sites Inventory. A park based inventory of archeological, historical, and ethnographic sites known to exist in the park. This inventory is only partially complete for most units of the System.

d. The National Catalog of Museum Objects. A centralized inventory of all museum collections owned by the National Park Service. Many park collections are not inventoried or are inadequately inventoried.

The Service emphasizes the completion or comprehensive revision of Cultural Resources Management Plans for each unit of the System. These plans guide the management and preservation of the System's cultural resources. The information from the resources basic inventories is a fundamental requirement for the preparation of adequate plans.

2. Resources Preservation and Maintenance. The basic management purpose of this activity is to ensure that cultural resources receive the care necessary to perpetuate their existence. The principal kinds of work are:

a. Conducting housekeeping, routine and cyclic preservation maintenance activities associated with historic and prehistoric structures, sites, and museum objects.

b. Monitoring environmental factors and visitor activities to obtain warnings of potential threats to resources, to determine resource preservation requirements, or to take corrective action.

c. Developing professional requirements and written guidelines for operational or project work to conserve the basic resource.

d. Executing preservation projects to bring cultural resources to a condition where routine or cyclical preservation maintenance will perpetuate the resource.

The bulk of this work is carried out at the park level by maintenance and cultural resources personnel who have had technical or craft training and experience in the special skills necessary to maintain and preserve cultural resources. Park technicians and maintenance personnel carry out the work in accordance with written guidelines developed by cultural resource specialists. Complex preservation work is carried out under supervision by professional staff at the Regional Office or under contract. Work includes such items as cleaning furnished historic structures, stabilizing prehistoric Indian ruins, repainting weathered historic buildings, replacing roofs, cleaning exhibits, fumigating collections, and maintaining security and fire detection systems.

Base funding for the Cultural Resources Management Program is distributed as follows:

1. Park Operating Programs............................ $23,188 649 FTE

Expenses budgeted at the park level for resources basic inventory, routine preservation maintenance, and related expenses for program planning and management.

2. Regional Office Programs........................... $13,364 260 FTE

Funds budgeted at the Regional Office generally are programmed to meet non-recurring requirements for history studies, archeological surveys, ethnograhpic studies, and other management documents; for cyclic preservation maintenance; and for program coordination and support. Regional funds also cover the cost of the cultural resources centers located in those Regions with a high concentration of historic, prehistoric, and archeological resources. The centers are staffed by historians, historical architects, archeologists, and other specialists in preservation and conservation who support the cultural resources management objectives of the National Park Service through a comprehensive program of research, project supervision, technical assistance, management planning, and centralized curation of museum objects. The distribution of funding for Regional cultural resources management activities is shown below:

	($000's)	FTE
Program coordination and support....................	$2,466	71
Cyclic preservation maintenance.....................	7,555	--
Regional cultural resources centers.................	3,343	189
Midwest Archeological Center....................	(284)	(31)
North Atlantic Historic Preservation Center....	(276)	(40)
Southeast Archeological Center.................	(468)	(18)

Park Management/Resources Management

	($000's)	FTE
Southwest Cultural Resources Center.............	(866)	(55)
Western Archeological and Conservation Center	(889)	(30)
Southeast Cultural Preservation Center.........	(560)	(15)

3. Servicewide Cultural Resources Management Program............................... $1,228 34 FTE

Funds budgeted under this category are used for salary and support costs for specialists in the Washington Office who provide overall program coordination and direction of the cultural resources management activities of the National Park Service.

4. Servicewide Cultural Resources Preservation Program $5,193 -- FTE

This program provides funds for stabilization and preservation work on cultural landscapes, archeological and historic sites, historic and prehistoric structures, and cultural and natural history museum collection materials. Funds are also used for archeological surveys, ethnographic studies, history studies, the preparation of management studies, and other research and data collection activities. Candidate projects are submitted annually by each Region. With the additional funding provided through the Park Restoration and Improvement Program, the Service has significantly expanded, in both numbers and scope, the projects included in the Cultural Resources Preservation Program.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	42,973	38,640	-4,333
(FTE-T)	(943)	(958)	(+15)

The Service is requesting a net decrease in funding for Cultural Resources Management to accommodate the following proposed additions and deletions. These are summarized and described in greater detail below.

	(000's)	FTE
Cultural Resources Survey Work -Alaska Mining Claims	+600	+9
Statue of Liberty Centennial/Ellis Island Operations	+260	+6
Transfer of Cultural Resources Preservation Program	-5,193	--
Total	-4,333	+15

Additional details are as follows:

1. Cultural Resources Work Related to Alaska Mining and Minerals Management..................... +$600 +9 FTE

Increased funds are proposed for archeological survey work needed to help the Service implement applicable laws and regulations governing mining activities in Alaska parks. By court order, the Service must prepare three major environmental impact assessments which require cultural resources surveys. In addition, surveys are required of all mining operations prior to approval of the proposed operating plan. The Service estimates that 40-60 plans of operation will be filed in fiscal 1987.

Park Management/Resources Management

2. Statue of Liberty Centennial/Ellis Island Operations.. +$260 +6 FTE

   Increased funds are proposed to add curatorial staff for the Ellis Island Immigration Museum with its two threatres, an artifact conservation laboratory, a geneological center, and a library which must be staffed. This is needed to handle an immense curatorial workload (over 15,000 square feet of artifacts in various stages of neglect and decay) and to cope with the heavy visitation (1.4 million) expected during the Centennial celebration.

3. Transfer of the Cultural Resources Preservation Program.............................. -$5,193 --

   The Cultural Resources Preservation Program is proposed for transfer to the "Operation of the National Park System-Fee Programs" account under proposed legislation.

Natural Resources Management

Natural resources management programs in the parks have a long history. Past activities often were undertaken to deal with an observed problem with a particular species, without an adequate understanding of the underlying causes or an understanding of how various actions would impact the total ecosystem. As the commitment to ecological preservation has grown in the public consciousness and the Service's understanding of the multitude of factors which affect park resources has improved, the need to develop a systematic, research-based approach to managing natural resources has become paramount.

The Service has made substantial progress in recent years in developing such an approach. One product of this process, the Resource Management Plan, documents all of a park's maintenance, protection, monitoring, and research activities relating to the management of natural and cultural resources, describes all of a park's resource problems, and discusses a full range of resource-related activities underway and planned for future years at the park. These Resource Management Plans are an integral part of the long-range strategy for protecting park resources (Point 1) and are useful in ascertaining the appropriate balance between visitor use and resource protection (Point 7). They also provide basic information on the critical resource issues facing the park to help begin the development of interpretive programs (Point 4).

Some of the activities identified in Resource Management Plans include:

   Fisheries Management - Activities related principally to the management of recreational fishing along with species and habitat preservation to ensure the long-term stability of fish populations. Fisheries management may include stream, lake, or bay fish surveys, creel censuses, fish planting in recreational zones, the restoration of native species, or habitat management.

Park Management/Resources Management

Wildlife Management - Activities relating to ensuring the health and stability of native populations of park wildlife species. Wildlife management projects may address overpopulation of elk or bison; animal-carried diseases such as rabies, plague, and encephalitis; control of hazardous species such as bears and rattlesnakes; restoration of native species; and habitat management. Techniques used for monitoring wildlife populations may include a variety of index counts or population transects. Specific actions to correct overpopulations or diseases may include population reductions by killing or by trapping and disposal by other agencies.

Vegetation Management - Projects designed to achieve habitat or species perpetuation and control. Monitoring programs are carried out to provide an early warning system for impact by visitors, native or exotic animals and plants, pollutants from within or outside the park, and other threats. Specific projects may include insect and disease control; natural or prescribed burning to achieve the desired vegetative and animal habitat conditions identified in the Fire Management Plan; reduction or elimination of exotics; surveillance of hazardous species in visitor use zones (i.e., toxic species); species restoration; and plantings. Plantings of native species may be necessary for erosion control and land rehabilitation following natural or human disturbance at roadcuts, trails, campgrounds, and other sites.

Air Resource Management - Activities primarily involving the monitoring of a park's air quality and air quality related values (i.e., air pollution sensitive resources, including visibility, plants, animals and historical and archeological structures and objects). Techniques used for air resource management include the use of various instruments for monitoring air pollution; establishing vegetation plots or conducting surveys to identify visible injury caused by air pollution; and the use of interpretive displays and presentations to make the park visitor aware of existing or potential air pollution problems.

Protection of Endangered and/or Threatened Species - Many park areas protect populations and habitats of plant and animal species which are threatened with extinction. The Service manages these endangered resources through an aggressive program of baseline data collection, research, and specific management actions to protect both populations and critical habitats. For example, several Rocky Mountain Region parks have participated in a program to restore nesting populations of peregrine falcons through the establishment of ongoing peregrine release programs supplemented by management efforts to protect nesting sites and prey populations.

Management of Non-native or Exotic Species - Populations of introduced plant and animal species occur in many parks. Where possible, the Service must control or eliminate introduced species which threaten native species in the parks. Activities may range from trapping or shooting feral goats and pigs, removal of plant species such as kudzu and tamarisk, or blocking the entry of undesirable species into parks.

Park Management/Resources Management

Energy, Mining, and Minerals - America's search for energy sources and the possible impacts of developing and processing these sources provide an array of potential internal and external alterations to park resources which require baseline data-gathering and long-term monitoring. All current, authorized activities such as drilling of gas and oil wells and construction of pipelines must be monitored and newly proposed projects must be evaluated to permit development of resource protective stipulations.

Back-Country Management - Increasing levels of visitor use of wilderness and back-country areas threaten the long-term environmental health of plant and animal populations in key trails, campsites, and other heavy use areas. Back-country management activity covers a range of actions including permit issuance and control, monitoring human use patterns of back-country sites, prevention of erosion to trails and revegetation of heavily used areas, and management of human/wildlife interactions to ensure human safety and prevent alteration of natural animal behavior patterns.

Biocide Use and Monitoring - The use of herbicides, insecticides, fungicides and other pesticides to control insects and other pests is carefully managed in the National Park System because of the potential for such pesticides to have adverse impacts on park resources and visitors. At the park level, activities include determining the need for biocide application after a thorough analysis of the problem, securing approval for each proposed use from the Region and Washington Offices, proper application by a trained and accredited applicator, and monitoring of the effects on the environment and pest species. Such use of biocides constitutes only one of several tools available for pest management under the parks' Integrated Pest Management Plan.

The base for natural resources management programs is distributed as follows:

1.	In-park resources management......................	$26,482	679 FTE

These funds are programmed at the park level to provide the staff, supplies, materials and related services to carry out activities such as those listed above for accomplishing the long-range strategy of protecting our natural resources and providing information to visitors on critical resource issues.

2.	Regionwide natural resource programs..............	$7,537	103 FTE

At the Regional level, the Service's Natural Resource Program provides funding, and to a limited extent, staff assistance to complete essential short-term monitoring, research and mitigation projects in individual park areas or in situations that will benefit several parks with a common problem. Particular emphasis is given to:

a. Establishing quantitative baseline data on park resources;

b. Defining threshold damage levels and developing exposure versus response relationships;

c. Conducting comprehensive monitoring programs to quantify existing environmental conditions and detect changes in those conditions; and

d. Conducting one-time or cyclic mitigation projects in parks.

These projects assist management in setting program priorities, allocating resources, initiating mitigation programs, solving short-term problems, and evaluating development alternatives. By programming for these activities at the Regional level, the Service is able to shift funds from park-to-park as projects are completed and/or priorities change in response to unanticipated events.

3. Servicewide Fire Management Program	$473	5	FTE

This program provides coordination and oversight of fire management planning, wild land fire suppression and presuppression activities in the National Park Service including training expenses, and NPS participation in the programs of the Boise Interagency Fire Center on a "fair-share" cost basis for such services as logistical support, warehouse operations, training, ADP support, and technology transfer.

4. Servicewide Natural Resource Programs.............	$18,176	130	FTE

Servicewide programs address problem areas of general concern, such as acid rain research, air quality monitoring, mineral resource management, and professional development. Funds are also used to respond to high priority needs for short-term (1-3 years) resource projects which are documented in Park Resource Management Plans. This approach permits the comparative evaluation of resource projects across park and Region lines and ensures that limited natural resource dollars are targeted to meet the highest priority natural resource needs of the Service. A brief description of each program follows:

Natural Resources Management Trainee Program	$806	23	FTE

This program was initiated in fiscal 1982 to address the serious shortage of qualified natural resources management specialists at the park level. Currently, less than 1 percent of the Service's permanent workforce is involved with natural resources management on a full-time basis. The program presently provides funds for a 24-month training program for 23 trainees selected on a competetive basis from throughout the Service. During the training program, the participants are assigned to parks to gain experience in resolving day-to-day management problems at the park level. In addition, they participate in special training sessions at the Regional and Washington Offices, the Service's training centers, and participating universities. At the completion of the training program, each participant will be assigned to a permanent position in the field as a natural resource management specialist. This program guarantees the highly competent natural resource management specialists that are integral to any long-range protection strategy.

The current class terminates in early fiscal 1987, and at that time, this program will be redesigned. Current trainees will take their positions and salaries to the parks and Regions to which they are assigned, and the balance of the funds will be transferred to the Servicewide Training Program where it will help to augment funds for continued natural resource training programs for National Park Service employees.

Air Quality Program	$4,064	-- FTE

The Clean Air Act supplements resource protection mandates contained in the National Park Service enabling legislation by assigning the National Park Service the responsibility for protecting air quality and related values in 48 national park areas designated as "class I" air quality areas. This designation permits little deterioration of air quality and imposes strict protection of "air quality related values." The base funds are used to monitor air quality in 40 parks designated as "class I" as well as 13 "class II" areas with significant air pollution concerns. Monitoring includes the use of teleradiometers to measure visibility parameters, still and time-lapse photography to doment the visibility of park vistas, and ambient air monitors to measure fine particulates, ozone, and sulfur dioxide. The base funds are also used to monitor biological effects in 56 parks to determine air pollution effects on natural resources and to establish damage thresholds and margins of safety necessary to prevent adverse air pollution effects on those biological resources. These data are used by NPS, EPA, the States, and private industry to analyze the impact of proposed new developments on park areas and to develop long-range strategies for protecting the natural and cultural resources of park areas. NPS also uses the information from the air quality monitoring program in interpretive programs to further the public's understanding of critical resource issues.

Acid Rain Program.........................	$1,230	-- FTE

The National Park Service participates on the Interagency Task Force on Acid Precipitation, which was established under Title VI of the Acid Precipitation Act of 1980. The Service carries out an active research program to:

a. Identify and monitor the occurrence of acid rain in 31 parks, under the National Atmospheric Deposition Program (NADP) sites.

b. Evaluate the extent of acidification of terrestrial and aquatic ecosystems in selected major parks, including Rocky Mountain National Park, Olympic National Park, Shenandoah National Park, and Sequoia/Kings Canyon National Parks.

c. Assess the effects of acid rain on stone, metal, masonry, and other materials used in the construction of historic and prehistoric structures and objects.

Park Management/Resources Management

Servicewide Natural Resource Program
Support .... $3,156 64 FTE

The funds cover personnel and related expenses for a staff of experts in various scientific and natural resource management disciplines and program managers who provide overall direction and support for the natural science research and natural resources management activities of the National Park Service.

Geographic Information Systems Field Unit $541 11 FTE

The Geographic Information System Program of the National Park Service supports the needs of individual parks for remote sensing and digital cartography projects. A staff of professionals in Denver, Colorado, uses remote sensing data, including Landsat and aircraft multispectral scanner and Thematic Mapper data, to develop or assist parks in the development of digital cartographic data bases for use in a variety of management applications. Parks are also provided with technical assistance in the acquisition of hardware, software, and professional services relating to the collection and analysis of such data.

Energy, Mining and Minerals Management
Program.................................. $1,408 32 FTE

These funds cover personnel and related expenses for the Energy, Mining and Minerals staff of policy, regulatory and technical experts that provide the Service's comprehensive Mineral Management Program. At present, 33 NPS units have internal mineral development activity and 151 units have external mineral development activity near their boundaries which currently or potentially affecting park resources and the visitor's experience. An additional 50 park units could be adversely affected by mineral development in the near future. The Mineral Management Program develops NPS policy and guidelines for controlling the effects of mineral development, coordinates with external mineral leasing and development agencies, oversees Servicewide implementation of the Minerals Program, and provides technical assistance and training to parks and Regions. While specific activities vary depending on Servicewide needs and assistance requests from parks and Regions, the staff are generally involved in the following activities: development of NPS guidelines for handling of mineral operations; revision/review/comment on NPS or external agency regulatory actions related to the management of mineral development in or near parks; technical and policy review and oversight on approximately 75 plans of operations and related environmental documents per year submitted for proposed mineral operations; conduct of mining claim validity examinations on claims within NPS units; preparation of mineral title abstracts for about six parks per year to identify specific outstanding mineral rights; conduct/review of mineral appraisals related to land acquisition; writing and review on 10-12 major NPS planning documents (General Management Plans, Land Protection Plans, etc.) per year involving the management of mineral development in NPS units; compiling and maintaining an accurate data base on outstanding mineral rights, mineral activities, and related impacts to parks; and presenting formal training sessions for field managers involved with mineral management.

Natural Resources Preservation Program..... $6,971 -- FTE

Total funding is used to address a variety of significant natural resources research, monitoring, and mitigation of problems. Projects focus on completing basic inventories of park resources, establishing long-term monitoring programs so that adequate early warning systems are developed for the protection of threatened resources, and correcting known natural resource problems. Examples of funded management, monitoring, and research projects are described below:

Effects of Caribou Seasonal Use and Food Preferences on Calving Grounds and Winter Range in Wrangell-St Elias National Park and Preserve

The first of 3 years of research on caribou range use and habitat conditions in Wrangell-St. Elias National Park and Preserve will start in fiscal 1987. The Mentasta caribou herd has experienced a relatively stable population during the past 15 to 20 years, which is unusal for Alaska caribou populations. The causes of this apparent stability are unclear, but it is important to know them because this herd is open to both sport and subsistence hunting, and the demand for both kinds of hunting is increasing. Research in 1987 will focus on studying of food habits and preference, seasonal use, and quality of range on the calving grounds, and will initiate study of the impact of snow depth and hardness on the availability to caribou of forage on winter range.

Research on Ungulate Populations in Parks of the Pacific Northwest Region

Elk populations in parks of the Pacific Northwest Region are subject to poaching, sport hunting outside park boundaries, tribal hunting in some of the parks, and habitat changes outside the parks. These influences can be expected to significantly alter natural population processes of elk in the parks and to require some form of mitigation. Research initiated in 1985 will continue into its third year in 1987; studies of elk population sizes, movements, and dynamics and of the impact on elk populations of such activities outside the parks as clear cutting, other land use changes, or hunting will be completed. In addition, research on mountain goats started in two parks in 1986 will be continued to develop baseline data and conduct comparative analyses of mountain goat population dynamics. The data produced by this research will be used to develop population monitoring procedures and to assess the causes and resulting ecosystem impacts of ungulate population changes.

Control of Aquatic Vegetation by other than Chemical Means at Jean Lafitte National Historical Park

The first year of cooperative interagency research on aquatic vegetation at Jean Lafitte will be conducted in 1987. Its purpose is to keep waterways open and to develop a biological control method to replace the mechanical method of control. Possible biological agents of control identified in earlier research and field tested in 1986 will receive additional field testing. A monitoring program to determine the effectiveness of these agents, which was established on a trial basis in 1985, will be refined and the results will be used to develop a computer program to provide site-specific treatment prescriptions. Project results will be used to develop aquatic vegetation management strategies that will be applicable not only to the park but also elsewhere in Louisiana and east Texas.

Effects of the Exotic Gypsy Moth at Shenandoah National Park

The third year of a gypsy moth monitoring and research program will be conducted at Shenandoah National Park in 1987. Ongoing monitoring of gypsy moth populations and concurrent defoliation of the predominantly oak forest, and research on the effects of defoliation on wildlife, forest, and aquatic systems, will be completed. The data produced by these efforts will be used to develop both a gypsy moth hazard rating system for park vegetation and conceptual models of impact of defoliation on key animal species such as black bear, deer, and brook trout. The hazard rating system and the conceptual impact models will be used for development of management strategies for Shenandoah, Blue Ridge Parkway, Great Smoky Mountains, and other units of the National Park System in the Southeast Region.

Restoration of Wildlife Species at Voyageurs National Park

Research and monitoring of specific populations of park wildlife will be initiated for the second year of a planned 3-year project. Work in 1987 will involve the measurement of numbers, diversity, and biomass of selected native herbivore and carnivore species. The ultimate results of the work will be used to determine whether protection alone will be sufficient to ensure restoration of at least some species, such as the moose, which still are extant in the park. The results also will be used to determine whether restorations of genetic diversity in some cases, such as the moose, or of entire populations in other cases, such as the caribou, through relocation of animals into the park will be beneficial or necessary to ensure restoration of park ecosystems.

Restoration of Aquatic Resources at Death Valley National Monument through Removal of Exotic Salt Cedar (Tamarisk) Trees

The exotic tamarisk grows rapidly, uses great quantities of water, and spreads rapidly once established. As a result, tamarisk can significantly change natural desert spring ecosystems and cause the loss of significant native plant and animal species. In 1987, Death Valley National Monument will complete the first year of a 3-year project to remove tamarisk from springs in the monument. Once the tamarisk is removed, the treated areas will become available for natural repopulation by native plant and animal species and the depressed ground water tables underlying the treated areas will begin to become restored by natural processes to more natural levels.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	52,668	47,797	-4,871
(FTE-T)	(917)	(934)	(+17)

The Service is requesting a net decrease in funding for Natural Resources Management to accommodate the following:

Park Management/Resources Management

1. Natural Resource Assessment Work Related to Alaska Mining Claims +$2,100 +17 FTE

Increased funds are proposed for natural resource assessment work needed to implement applicable laws and regulations governing mining activities in Alaska Region parks. Environmental organizations brought suit against the National Park Service for lack of compliance with its own mining regulations. The District Court ruled in favor of the plaintifs, requiring the Service to properly process mining plans of operation for mining in the Alaska Region parks and to prepare complete environmental assessments to support decisions on whether those operations will contribute to cumulative environmental impacts.

Park units in the Alaska Region currently contain 82 percent (2,100 claims) of all the mining claims in the National Park System. The Alaska Regional Office projects that 40-45 plans of operation will need to be processed in 1987. This contrasts to only 10-15 per year in the 1970's. The present staff of 3 FTE's is not sufficient to handle this increased workload. Specifically, additional resources are required for the following activities:

Plan of Operation Review and Approval: Includes completeness determination, review and comments, review of reclamation plans, complete bonding procedures, do public notice and cultural clearances, prepare environmental assessments and section 810 evaluations, and review access permits for use of designated roads and prepare related environmental assessments.

Operations Monitoring, Compliance and Enforcement: Visit active operations to determine compliance, evaluate reclamation efforts, collect baseline data for specific claims, register commercial vehicles, and take enforcement actions.

Claim Validity Examinations, Appraisals, Donations, Acquisitions and Surveys: Work with claimants, complete data collection, do field examinations, prepare reports, complete followups and any court related work, prepare appraisal contracts, maintain land status records, survey claim locations, and do any nominal purchase, exchange or donation work.

Abandoned Mineral Program: Identify abandoned mineral properties and evaluate reclamation needs, do field inventory and data collection, contract and supervise reclamation projects, work with the Environmental Protection Agency on hazardous waste management problems.

Minerals Planning/Coordination: Assist the Service's Planning Division in planning efforts, prepare minerals management strategies/action plans, and coordinate with adjacent landowners.

Administration and Contracting: The difficult logistical problems of operating and contracting for services constitute an additional workload.

Park Management/Resources Management

In addition, three major Environmental Impact Statements were required by the court order for Denali National Park and Preserve, Wrangell-St. Elias National Park, and Yukon-Charley Rivers National Preserve to look at the cumulative impacts of mining operations. This workload will be handled primarily by Environmental Impact Statement teams from the Denver Service Center.

The proposed increase will cover personnel services, aircraft bearing, travel, equipment, and support costs for these activities. A distribution of the request by organization in shown below:

Denali National Park and Preserve	$150	3 FTE
Wrangell-St. Elias National Park and Preserve	$150	3 FTE
Alaska Regional Office	$2,400	20 FTE

Regional Office staff include seasonal archeological survey teams as well as mining and environmental specialist who will carry out monitoring, review, and assistance functions Regionwide. The above includes increases ($600,000 and 9 FTE's) shown under the Cultural Resources section.

2. Transfer of the Natural Resources Preservation Program -$6,971 -- FTE

The Natural Resources Preservation Program is proposed for transfer to the new account, "Operation of the National Park System-Fee Programs."

Distribution of decrease by object class

	FTE	Amount
Personnel services	+32	+$876,000
Personnel benefits		+101,000
Travel		+101,000
Other services		-10,391,000
Supplies and materials		+84,000
Equipment		+25,000
Total		-9,204,000

Justification of Program and Performance

Activity: Park Management
Subactivity: Informational Publications

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Informational Publications	($)	2,890	2,766	2,890	--	-2,890
	(FTE-T)	(23)	(23)	(23)	(--)	(-23)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Informational Publications	2,890	-124	2,766

The reduction of $124,000 mandated by P.L. 99-177 will primarily impact the amounts budgeted to print National Park Service folders and handbooks. Several handbooks that are ready to print will be delayed until next year. Print order for park folders will be cut approximately 10 percent for the remainder of the year.

Authorization

16 U.S.C. 1, The National Park Service Organic Act

Objectives

To supply each park with current folders and maps for distribution to visitors at a ratio of one folder for each 10 visitors.

To produce, for sale through the Government Printing Office, inexpensive posters and charts for parks needing such publications to supplement onsite interpretation.

Base Program

Park publications have been associated with NPS visitor services from the earliest days. Their purpose is to help visitors get around an area on their own as well as to inform them about the park's purposes, regulations, accommodations, and safety precautions. One of the important tasks is to protect the site resources and the Government's interest in the event of tort claims by the safety messages contained in the folders.

Park Management/Informational Publications

National Park Service publications consist of Maps, Folders, and Site Bulletins that help visitors learn about a park's unique resources through a brief visual reference; and Handbooks, Systemwide Guides, Charts and Posters that deal with the park story in greater depth, or through display approaches.

Park folders are supplied free to visitors upon their entrance to most parks. Since these folders are frequently the first contact visitors have with the management of a park, they must be stimulating, comprehensible, and reliable. They contain brief interpretive stories, provide essential safety and tourist information, and serve as a general guide to the park and its surroundings, thus supporting interpretation, visitor services, and resources management.

Park managers look upon the informational folders as a management tool that contributes to cost and manpower savings. Park folders save staff time by answering repeatedly asked questions. They contain all essential safety information. Folders are used as a basic training aid for new employees, and they provide educational materials for schools, organizations, and special interest groups of all kinds. In addition, they support and encourage tourism from this country and abroad.

Handbooks and posters are also produced to supplement onsite interpretation. These publications are printed and sold by the Government Printing Office.

All National Park Service publications are prepared by a professional staff at Harpers Ferry Center, Harpers Ferry, West Virginia. As shown on the following table, an estimated 12.6 million copies of park folders were printed in fiscal 1985.

National Park Service - Park Folders
Comparison of Funding, Production and Unit Costs
1979 - 1985
($ in thousands)

Fiscal Year	Appropriation	Funds for Folders	Millions of Folders Produced	Unit Cost Per Folder	Millions of Visits	Folder to Visitor Ratio
1979	$2,932	$1,409	24.1	$.058	279.2	1-12
1980	2,850	1,258	17.4	.072	294.6	1-17
1981	2,947	1,312	17.2	.076	329.7	1-19
1982	2,832	1,394	15.2	.092	334.6	1-22
1983	2,957	1,260	15.7	.090	337.9	1-25
1984	2,928	1,100	13.7	.080	328.4	1-24
1985	2,850	1,173	12.6	.093	336.6	1-27

Informational folders specific to each park account for the largest share of the Service's publications program. These are given to park visitors free of charge in most areas. However, folders are currently being sold in about 40 parks, with more being added in the future as inventory needs dictate.

Park Management/Informational Publications

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	2,890	--	-2,890
(FTE-T)	(23)	(--)	(-23)

Under proposed legislation, the entire Informational Publications Program will be funded from the estimated $59 million in recreation fees revenues under the "Operation of the National Park System-Fee Programs."

Justification of Program and Performance

Activity: Park Management
Subactivity: International Park Affairs

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
International Park Affairs	($) (FTE-T)	791 (10)	758 (10)	791 (10)	423 (10)	-368 (--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
International Park Affairs	791	-33	758

Travel and technical assistance projects will be curtailed to comply with the requirements of P.L. 99-177.

Authorization

Public Law 96-515	Amendments to the Historic Preservation Act, 1980, section 104
Public Law 96-304 42 U.S.C. 4346 16 U.S.C. 1537	(Section 8) as amended, 1982

Objectives

(1) To assist the Service in carrying out its primary mission to the American public and share critical resource information by importing international advances in park management; (2) to assist in protecting and interpreting National Park System areas on the Mexican and Canadian borders; and (3) to effectively implement the 12 Point Plan (Point 4) concerning international cooperative programs that are in the interests of the United States involving technical and professional assistance for the protection and management of national parks and other protected areas of national and world significance.

Base Program

The Service responds to directives from the executive (United States bilateral, environmental and economic agreements) and congressional (conventions, treaties, and acts) branches of government to cooperate with other nations, international organizations, other U.S. Departments and agencies, universities, and private organizations and foundations in the enhancement of the world's environment through the protection of outstanding natural and cultural resources and critical habitats. In so doing, the following activities are specifically supportive of Point 4 of the 12 Point Plan, and in addition, directly supportive of Points 1, 3, 5, 6, 7, 8, 9, 10, and 12.

Park Management/International Park Affairs

The International Park Affairs activity provides the staff to plan, manage, and coordinate the following International Cooperative Programs:

1. Cooperation with Parks Canada in protection of national parks and reserves on the United States-Canadian border has resulted in ongoing interaction which is mutually beneficial to both nations. Recent results include directorate level discussions of operational liaison at adjacent border protected areas in the Alaska-Yukon regions and interpretive exchanges at selected historic sites, assistance in Parks Canada in setting up park cooperating association guidelines and cooperative interpretation of the whales of Puget Sound.

2. The objectives of the "Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere" include establishment and management of national parks and other protected areas, as well as fauna preservation. The convention provides for contracting governments to cooperate among themselves in these endeavors. The Endangered Species Act (Public Law 93-205), reauthorized in 1982, and Executive Order 11911 gave responsibility for implementing the Convention to the Department of the Interior. The Service carries out technical assistance projects with Western Hemisphere nations in the following forms: Exchange of written materials, custom designed study tours and training courses in the United States of America, and a limited amount of direct technical assistance abroad. Increased emphasis on this region has resulted from the President's Caribbean Basin Initiative (CBI). An average of 35 assistance requests from foreign governments in this region are received each year.

   Cooperation with Mexican agencies in the protection of national parks and reserves on the United States-Mexican border includes technical interchanges with Mexican authorities at Big Bend National Park, Texas; and promotion of cultural interchanges at Chamizal National Memorial, Texas. The National Park Service and the United States Fish and Wildlife Service are developing a parks and wildlife protocol within the new United States-Mexico environmental protection agreement.

   Congressional add-on of $249,000 (FY 1986) will provide for an increased level of activity in implementing Point 4 of the 12 Point Plan under the Western Hemisphere Convention (Section 8, P.L. 96-304, as amended, 1982).

		Projected	
	1985	1986	1987
Western Hemisphere Technical Assistance Projects	5	25	0

3. The Service continues an active role in the convention concerning the protection of the world cultural and national heritage, and provides staff support to the Assistant Secretary in his role as U.S. Delegation to the World Heritage Committee. In 1984, San Juan National Historic Site, including La Fortaleza, Puerto Rico, and Great Smoky Mountains National Park, North Carolina-Tennessee, were added to the World Heritage List; in 1985, the Statue of Liberty and Yosemite National Park became World Heritage Sites. Thirteen World Heritage Sites are now managed by NPS; the State of Illinois manages one World Heritage Site (Cahokia Mounds State Historical Park).

Park Management/International Park Affairs

	1985	1986	Projected 1987
World Heritage Nominations, Total U.S.	2	2	2
World Heritage Nominations, National Park System Areas	2	2	2

In addition, the Service is required to consider cooperation with other nations through technical assistance request from the 92 States which are party to the World Heritage Convention to aid in protecting natural and cultural resources of value to all mankind (P.L. 96-515); the Service averages 20-30 World Heritage assistance requests from other nations per year. Subject to available funds, pay annual membership dues and NPS cooperates with the International Union for the Conservation of Nature (IUCN) and International Council on Monuments and Sites (ICOMOS) which assist in treaty implementation; membership dues are required.

	1985	Projected 1986	Projected 1987
World Heritage Assistance Projects	5	15	0
IUCN/ICOMOS Membership dues	yes	yes	no

4. The Service, upon request, provides orientation and training opportunities for foreign professional park officials and staff. Individual training programs are designed and implemented on a wide variety of park management and planning subjects and for various periods of time (1 to 2 weeks up to a year). An example of efficient and effective training is the month-long International Seminar on National Parks and Equivalent Reserves. Held annually with cosponsorship of the Service, Parks Canada, and the University of Michigan, the seminar is designed for park leaders from other countries. Since 1965, 630 park executives and conservation leaders from 100 countries have participated. Trainees'costs are borne by their own governments or other funding agencies for both of these training programs.

	1985	Projected 1986	Projected 1987
Training programs	110	250	65
Orientation/programming of individual foreign officials in related fields	340	400	135

5. International Affairs is managing AID funded contracts with universities and conservation organizations on designing training units on planning and resource management in the humid tropics, on rangelands, and in coastal areas. In addition, the Service is providing training and management assistance to four national parks in Sri Lanka and technical assistance to lesser developed countries in Africa on a reimbursable basis.

   NPS also cooperates with AID in other reimbursable activities designed to provide information, case studies and training to 50 missions and developing countries on the management of natural resources so that AID development projects are designed and executed in an environmentally sound manner.

Park Management/International Park Affairs

6. Approximately 500 Peace Corps volunteers are working in 40 countries around the world in natural and cultural resource conservation. The NPS supplies training and technical information resources, upon request, to these volunteers under an interagency agreement with ACTION/Peace Corps; and, at ACTION's request, NPS has detailed an Environmental Programs Specialist to Peace Corps to assist in natural resource conservation programs and volunteer training on a fully reimbursable basis.

7. The International Park Affairs staff manages information exchanges on national park planning and management between the Service and foreign national park agencies. Technical information is sent out, upon request, and is received both on a regular and as-needed basis. A reference collection is maintained, and information is promulgated internally as applicable. A professional park manager's journal, cosponsored by the Service, Parks Canada, Food and Agricultural Organization, Organization of American States, the International Union for the Conservation of Nature and Natural Resources (IUCN), and the World Wildlife Fund provides systematic communication between national park systems around the world. Congressional add-on funds (FY 1986) provide the basis for producing a Spanish Edition of this journal for the Western Hemisphere nations of Central and South America.

	1985	Projected 1986	Projected 1987
Technical information requests received and answered	265	280	300

8. The Service is responsible for participation in the following ongoing U.S. Government scientific, economic, and bilateral environmental agreements with foreign nations:

U.S.-Saudi Arabia Joint Economic Cooperation Agreement,
U.S.-Spain Treaty of Friendship and Cooperation,
U.S.-Japan Cooperation on Development and Utilization of Natural Resources,
U.S.-USSR Agreement on Cooperation in the Field of Environmental Protection,
U.S.-Peoples Republic of China Accord for Cultural Exchange,
U.S.-Peoples Republic of China Science and Technology Agreement,
U.S.-Morocco Tourism Accord,
U.S.-Canada Natural Park Agreement
U.S.-Mexico Environmental Agreement/Joint Committee for the Conservation of Wildlife and Plants, and
U.S.-India Science and Technology Agreement.

The Service also cooperates in park and protected areas conservation programs with public and private international organizations. Programs include technical assistance and two-way exchanges. The U.S.-Saudi Arabia program is completely funded by Saudi Arabia.

Park Management/International Park Affairs

Projects/Missions under Formal U.S. Bilateral, Multilateral Agreements	1985	1986	Projected 1987
Saudi Arabia	2	1	0
Spain	2	1	0
Japan	3	1	0
Peoples Republic of China	2	2	2
USSR	0	1	1
Canada	1	2	0

Under authority of Public Law 83-480 (Agricultural Trade Development and Assistance Act) and Public Law 93-205 (Endangered Species Act) and Public Law 96-515 (World Heritage), NPS provides technical assistance to India and Egypt in management of national parks and critical habitats. These programs are managed and monitored by International Affairs staff, but costs in each of the foreign nations are funded through the Special Foreign Currency Program. The Congressional add-on of $497,000 (in Indian Rupees), fiscal 1986 will provide the basis for implementing the contractual obligations and continuing training programs recommended by the Indian/United States Subcommission on Science and Technology (March 1985).

	1985	1986	1987
Egypt (Number of programs)	1	0	0
India (Number of programs)	3	15	8

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	791	423	-368
(FTE-T)	(10)	(10)	(--)

A summary of the proposed decrease by program is shown below:

International Council on Monuments and Sites (ICOMOS) Participation and membership dues	-$119	-- FTE
Western Hemisphere Technical Assistance Projects	-249	-- FTE

The Service recommends decreased funding (-$368) for International Park Affairs which would result from termination of these two programs. Support for international activities is a lower priority than maintaining services and facilities in the units of the National Park System. Given the need to reduce overall Federal spending, the Service believes that continued funding for assistance projects is not essential.

Distribution of decrease by object class	Amount
Grants, subsidies, and contributions	-$368,000

Justification of Program and Performance

Activity: Park Management
Subactivity: Volunteers in the Parks

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Volunteers in	($)	487	466	487	--	-487
the Parks	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Volunteers-in-Parks	487	-21	466

The impact of P.L. 99-177 will be to reduce funds available for reimbursing volunteers. The effect will be fewer volunteers working in parks.

Authorization

Public Law 91-357, 16 U.S.C. 18	Volunteers in the Parks Act of 1969
Public Law 98-540	Amendments to Volunteers in the Park Act of 1969

Objectives

To make use of volunteers in providing services to park visitors that would otherwise not be available, assist park management in accomplishing a great amount of work that otherwise would not get done, improve public and private sector cooperations, foster an appreciation for conservation and conservation work, and allow the NPS to better serve the public and preserve the resources under its care at the minimum cost to the taxpayer. Volunteers have an important role in implementing the Director's 12-Point Plan, especially Points 3-6 which deal with interpretation and communication.

Base Program

The Service utilizes interested citizens who are willing to donate their time and expertise to perform a variety of activities in the parks. The authorizing legislation prohibits the displacement of permanent and seasonal employees by volunteers, but within that constraint, thousands of people have contributed their time and talent to help the Service accomplish its mission. In fiscal 1985, 31,318 individual volunteers contributed almost 764 workyears of work to 265 parks, which are valued at over $10 million. This is a 16 percent increase in the number of hours contributed over 1984. Volunteers are being utilized in almost all aspects of park management. By law, volunteers are reimbursed only

Park Management/Volunteers in the Parks

for incidental expenses such as the out-of-pocket costs of local transportation, uniforms, supplies and materials, lodging and meals. These costs are extremely low. Presently, the NPS receives approximately $22 worth of voluntary work from every dollar spent on the program.

Base program funds for the VIP operations are utilized in four major categories:

Reimbursing volunteers for meals, transportation and lodging	$343,000
Purchasing necessary supplies, materials, and other expenses	38,000
Reimbursing volunteers for historic costumes and uniforms	92,000
Training	14,000
Total, Base Program	487,000

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	487	--	-487
(FTE-T)	(--)	(--)	(--)

The Volunteers-in-Parks Program is proposed for funding within the $50 million estimated to be available from increased recreation fees under proposed legislation.

Justification of Program and Performance

Activity: Forest Fire Suppression and Presuppression

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Forest Fire Suppression and Presuppression	$	1,169	1,119	1,326	1,326	—
	(FTE)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Forest Fire Suppression and Presuppression	1,169	-50	1,119

Due the unpredictability of wildfire presuppression and suppression costs in any given year, the budget request for the National Park Service includes only a minimal amount for these activities. The Service uses authority provided annually under section 102 to temporarily transfer funds from other accounts to meet actual requirements for the prevention and suppression of wildfires. These funds are later proposed for restoration to the original account through a supplemental appropriation. Depending on the frequency and severity of actual fire outbreaks during fiscal 1986, the reductions mandated by P.L. 99-177 will necessitate additional transfers from the "Construction" and/or "Land Acquisition" appropriations to cover actual costs.

Authorization

16 U.S.C. 1 The National Park Service Organic Act

Objectives

To provide minimum essential emergency presuppression preparedness, prevention and emergency initial attack capability.

To rehabilitate burned areas to mitigate adverse impacts on park natural systems and restore park environments.

To respond to wildfire outbreaks quickly and effectively to protect the unique cultural and natural resources of the National Park System.

Forest Fire Suppression and Presuppression

Base Program

In order to perpetuate the natural resources and protect visitors and adjacent properties, wildfires must be prevented or suppressed. Following wildfires, the burned area may need rehabilitation to control erosion, minimize the impact of the necessary control action, and remove hazards to the public. In some severe cases, replanting and reseeding may be required in order to prevent unacceptable soil losses or flood hazard.

The Forest Fire Suppression and Presuppression Activity provides for a systemmatic program of fire prevention and presuppression activities in 43 parks based on FIREPRO, an operation analysis aimed at identifying minimum requirements for presuppression activities following an intensive assessment of historic fire occurrences and the potential for wildland fires. Funds are also programmed for emergency presuppression actions in various parks when unusual periods of high fire danger occur. Stretches of hotter and drier weather increase the chance of wildfires and pose a threat to park resources. During such periods, emergency presuppression funds are used to improve the parks preparedness to deal with wildfires.

The National Park Service participates with 4 other land management agencies in the sharing of crucial resources. The Forest Fire Suppression and Presuppression activity includes funding for the Service's share of cost-effective interagency activities such as Interagency Hotshot Crews, retardant aircraft operations, and the operation of the National Interagency Fire Center in Boise, Idaho.

NATIONAL PARK SERVICE
Analysis by Subactivity

Activity: Park, Recreation and Wilderness Planning

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Enacted to date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase (+) or Decrease (-) 1987 Est. over 1987 Base
Water Resources Studies	$1,908	$1,909	1,827	$1,909	$2,909	+1,000
General Management Plans	2,360	2,332	2,232	2,332	2,332	--
Total	4,268	4,241	4,059	4,241	5,241	+1,000

Justification of Program and Performance

Activity: Park, Recreation and Wilderness Planning
Subactivity: Water Resources Studies

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Water Resources	($)	1,909	1,827	1,909	2,909	+1,000
Studies	(FTE-T)	(13)		(13)	(13)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Water Resources Studies	1,909	-82	1,827

Reduced funding resulting from P.L. 99-177 will reduce the capability of the Water Resources staff to respond to water related problems of individual parks. Fewer technical assistance projects and studies will be initiated or completed.

Authorization

16 U.S.C. 1

Objectives

To facilitate the protection, management, and enhancement of water and riparian resources within units of the National Park System by providing timely research and assistance to resource managers both within and outside the Service; collect and analyze surface and subsurface water data needed to develop water supplies for visitor and employee needs; delineate wetlands and floodplains areas; ensure the protection of park, water resources and water dependent ecosystems of park areas.

The total Water Resources Program effort is in furtherance of Point 1 of the Service's 12-Point Plan in that program action is directed towards the protection of water resources quantity and quality, thus, contributing to the preservation and enjoyment of the natural, cultural, and recreational resources of System areas. In addition, the information and data collected under this program on critical water resources issues is available to be shared with the public pursuant to Point 4.

Base Program

Water resources activities focus on all matters dealing with water and are intended to address the increasing array of legal and administrative requirements and water related problems occurring throughout the National Park System. These problems range from the health impacts of small scale leaky septic systems on drinking water supplies to the effects on park resources of large regional hydroelectric projects. They involve toxic discharges from mining and industrial operations, organic pollution from municipalities and new residential encroachments or malfunctioning sewage treatment facilities as well as domestic, municipal, and industrial withdrawals which reduce surface flows, lower ground water tables, and in coastal areas, possibly produce salt water intrusion.

Specific program components encompassing legal and administrative requirements include:

1. Water resources management planning, including the formulation and implementation of water quality management plans; location and development of groundwater sources to replace existing surface water supplies; delineation of floodplains and related hazards to assure protection and preservation of life and property in parks;

2. Energy effects analysis, pursuing an active research effort designed to provide park resources managers with effective tools, techniques, and data to meet evolving threats to aquatic or riparian ecosystems stemming from external or internal energy-resources development; and

3. Technical assistance to parks to provide natural resource managers with scientifically and technically sound methods and guidance to solve problems related to water quality, supply, and mitigation issues.

Base funds cover the cost of staff experts in the Water Resources Division located in Fort Collins, Colorado. These experts in hydrology, water quality, and water resources management undertake the research, monitoring, and planning projects required to understand and resolve the complex water related problems of the National Park Service.

The water resources studies requiring expertise beyond the scope of NPS staff are conducted under agreement with other Federal agencies, principally the U.S. Geological Survey or by contract with State agencies, universities, or private consultants.

A distribution of the base program is shown below:

	($ in thousands)
Salaries and administrative expenses	$566
Project funding	1,343
Total base program	1,909

Examples of projects in progress in fiscal 1986 include:

- -- Studies on the impact of planned water resources projects (dams, diversions, etc.) on the quality and quantity of park waters in Dinosaur National Monument, Glen Canyon National Recreation Area, New River Gorge National River, and other parks.
- -- Develop new potable ground water supplies at Delaware Water Gap National Recreation Area, Cape Lookout National Seashore, and Biscayne National Monument.

-- Conduct flood hazard surveys at Ozark National Scenic River, Olympic National Park, and Chesapeake and Ohio Canal National Historical Park.
-- Determination of the fate and transport of heavy metals and persistent organic contaminants in aquatic ecosystems of selected parks. Initial focus is on Gateway National Recreation Area, Upper Delaware Scenic River, Great Smoky Mountains National Park, Big South Fork National River and Recreation Area, Big Bend National Park, and Amistad National Recreation Area.
-- Studies to gather baseline data on the geothermal resources of Lassen Volcanic and Yellowstone National Parks including the establishment of a monitoring network needed to assess the possible adverse impacts from external geothermal leasing activities in the vicinity of the parks.
-- Conduct water monitoring programs at Gettysburg National Military Park, Denali National Preserve, Big Thicket National Preserve, and other parks.

The following workload factors are representative of the scope of activities presently conducted in the Water Resources Studies Program:

	1985 (Actual)	1986 (Estimate)	1987 (Estimate)
Number of comprehensive water resources studies conducted	9	9	7
Number of potable water sources located	2	2	2
Number of water resources management plans developed	2	2	3
Number of water monitoring programs conducted	35	29	27
Number of flood hazard surveys conducted	3	2	2
Total	51	44	41

Increase for 1987	1987 Base	1987 Estimate	Increase
($)	1,909	2,909	+1,000
(FTE-T)	(13)	(13)	(--)

The Service is proposing an increase in funding for Water Resources Studies to respond to court-ordered water rights adjudication as required under the McCarran Admendment (66 Stat. 560, 43 U.S.C.A. 66). The Service will be faced with litigating some 25-30 water rights cases in four States during the year, and an additional 70-80 cases in 19 States will require administration or judicial adjudication in the next few years. The effort is needed to protect the Service's right to the consumptive water required for park employees and visitors as well as water resources needed to preserve the environment and essential ecological processes.

Distribution of increase by object class	FTE	Amount
Other services	--	+$1,000

Justification of Program and Performance

Activity: Park, Recreation and Wilderness Planning
Subactivity: General Management Plans

Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec.(-) from Base
General Management Plans	($)	2,332	2,232	2,332	2,332	—
	(FTE-T)	(61)	(61)	(61)	(61)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
General Management Plans	2,332	-100	2,232

Work on general management planning will be slowed, fewer plans will be completed and needed management and resource management decisions will be delayed.

Authorization

Public Law 95-625	National Parks and Recreation Act of 1978
16 U.S.C. 1	
42 U.S.C. 4321	

Objectives

Prepare and revise in a timely manner, General Management Plans to guide the National Park Service in the protection, use, development, and management of each unit. Because of the spectrum of function of these plans, they contribute to many aspects of the Director's 12-Point Plan. These functions include: (1) developing and communicating to the public what the Service's intentions are with respect to development and resource management; (2) involving the public, concessioners, and other cooperators in planning the park; (3) identifying the lands needing protection via Land Protection Plans; (4) assessing the condition of visitor use facilities and park management to recommend needed changes; and (5) fostering more creative and cost-effective management plans.

Base Program

General Management Plans and associated plans provide the basic guidance for the management of each unit of the National Park System.

Park, Recreation and Wilderness Planning/General Management Plans

These plans provide the means of complying with park legislation, other basic legal documents and the Service's management policies, general compliance requirements and regulations affecting all Federal land management agencies.

The need for park plans is identified annually in accordance with a Servicewide priority list. The program is executed in three stages. The first stage is identifying issues, scoping the study, and identifying basic resources data requirements. Stage two involves data gathering and analysis. Stage three is the actual conduct of the planning study for which general management plan funding is used. After a General Management Plan is programmed, a multidisciplinary team begins preparation of the plan. The issues the plan is to address are clearly identified, preliminary alternatives to deal with them are formulated, and a concise alternatives document and environmental assessment or environmental impacts statement is developed for public review and comment. Following analysis of public comments, a draft General Management Plan is prepared. This contains an analysis of the environmental impacts of the proposal and various alternatives on the environment, as well as an analysis of the relative costs of each alternative. The General Management Plan addresses park access and circulation, resource protection, visitor use activities, and capacities. It provides the justification for park development and major management decisions and thus serves an essential programming function.

At present there are 337 units of the System qualifying for general management or similar plans. Of these, 276 have approved plans, although over half of these have plans 10 years old or older. Approximately 20 areas do not require comprehensive plans to guide management decisions. Most are small National Capital parks for which plans would be programmed only as needed and a few small areas operating in accordance with a statement for management.

The principal benefit of General Management Plans and associated plans is that they provide an approved, documented basis for fulfilling the legal mandate of the park and for the appropriate level of protection and use of nationally significant resources. Parks have varying economic impacts on their surrounding regions in the form of tourism and, where development is involved, construction activity in the park. Thus, a primary benefit of approved plans is that they provide an agreed-upon document among interested parties to record how a park should be protected, developed, and used. This eliminates the possibility of arbitrary decisions and reduces the likelihood of litigation on Service actions. The process also involves the public in decisionmaking and facilitates coordination of planning and management activities with land managing agencies and other interests in the park vicinity.

Newly authorized parks usually have a legislatively mandated date for submission of a General Management Plan to the Congress. Timely completion and approval of these plans are necessary in order to identify and program for the protection and public use needs of these parks.

The following workload and output factors reflect the General Management Plan Program:

Park, Recreation and Wilderness Planning/General Management Plans

	Fiscal 1985	Fiscal 1986	Fiscal 1987
Base ($ millions)	2.3	2.3	2.3
Plans Underway	38	30 to 40	20 to 30
Estimate of plans to be approved by calendar year	11	20 to 25	10 to 15

In addition to the above, a Reconnaissance Survey of Roads and Sites was completed in fiscal 1985. Also, the Service has been directed to prepare a Management Alternatives Report for Congress on the City of Rocks area of Idaho in fiscal 1986.

NATIONAL PARK SERVICE
Analysis by Subactivity

Activity: Statutory or Contractual Aid for Other Activities

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Enacted to date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase (+) or Decrease (-) 1987 Est. over 1987 Base
Roosevelt Campobello Park International Park Commission	410	408	390	408	408	--
Ice Age National Scientific Reserve	576	573	548	573	573	--
Lowell Historic Preservation Commission	526	537	513	537	537	--
Folger Shakespeare Library	343	174	167	174	--	-174
Corcoran Gallery of Art	343	174	167	174	--	-174
Mary McLeod Bethune NHS	98	99	95	99	99	--
Martin Luther King, Jr., Center for Nonviolent Social Change	198	199	190	199	199	--
Phillips Gallery, Arena Stage, National Building Museum, and National Capital Childrens Museum	1,372	696	668	696	--	-696
William McKinley Tomb	--	447	427	447	--	-447
Fisk University, Jubilee Hall	--	168	161	168	--	-168
Total	3,866	3,475	3,326	3,475	1,816	-1,659

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Subactivity: Roosevelt Campobello International Park Commission

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Roosevelt Campobello International Park Commission	($)	408	390	408	408	--
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Roosevelt Campobello International Park Commission	408	-18	-390

The United States and Canada equally share the cost of operating this site. The reduction required by P.L. 99-177 will likely be matched by a cut in support from the government of Canada resulting in an overall decrease of 9 percent. To absorb such a decrease, staffing levels will be cut and services decreased during the peak summer months.

Authorization

Public Law 88-363 Roosevelt Campobello International Park Act

Objective

To operate the Roosevelt Campobello International Park on a shared-cost basis with the government of Canada.

Base Program

During his youth and early adult years, Franklin Roosevelt spent many summers on Campobello Island, New Brunswick Province, Canada. The island held a special attraction for the Roosevelt family. It was here at the age of 39 that Franklin D. Roosevelt was stricken by poliomyelitis. After his death in 1945, Eleanor Roosevelt continued to use the family home on Campobello Island as a vacation retreat. The park commemorates the life of President Roosevelt on Campobello Island. It is operated by the Roosevelt Campobello International Park Commission. Operating costs are shared equally by the United States and Canada.

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Subactivity: Ice Age National Scientific Reserve

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Ice Age National Scientific	($)	573	548	573	573	--
Reserve	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Ice Age National Scientific Reserve	573	-25	548

The reductions mandated by P.L. 99-177 will require a decrease in the level of matching Federal support provided to operate the Ice Age National Scientific Reserve in Wisconsin. Reduced Federal support will necessitate cuts in maintenance, research, interpretation, and other public programs.

Authorization

Public Law 88-655	Ice Age National Scientific Reserve Act, Designation and Administration
Public Law 91-483	Ice Age National Scientific Reserve, Financial Assistance

Objective

To operate the Ice Age National Scientific Reserve.

Base Program

The park contains nationally significant examples of the effect of glaciers in shaping the earth's surface. The park consists of nine separate units, five of which are operational: Kettle Moraine State Forest, Devils Lake, Mill Bluff, Horicon, and Interstate Park. In accordance with the authorizing legislation, the National Park Service pays for up to one-half the cost of acquisition, development, and operations; the State of Wisconsin pays the balance. The park is operated by the State of Wisconsin, Department of Natural Resources.

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Function: Lowell Historic Preservation Commission

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Lowell Historic						
Preservation	($)	537	513	537	537	--
Commission	(FTE-T)	(14)	(14)	(14)	(14)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Lowell Historic Preservation Commission	537	-24	513

The reductions mandated by P.L. 99-177 will require decreases in travel, printing expenses, and the purchase of supplies and materials. Vacant positions, to the extent they occur, will be lapsed for a longer period of time.

Authorization

Public Law 95-290 Lowell National Historical Park Act

Objectives

To pay for the operating costs of the Lowell Historic Preservation Commission.

Base Program

Public Law 95-290 established both the Lowell National Historical Park and the Lowell Historic Preservation Commission in Lowell, Massachusetts. The Commission is funded through the National Park Service and is responsible for directing and assisting in the preservation of identified significant properties throughout the preservation district which surrounds the park. The Commission is supported by a permanent staff of experts in historic preservation and planning. The costs incurred by the Commission include:

Personnel services	$392
Travel and transportation	15
Utilities	30
Printing	10
Supplies and materials	30
Other services	60
Total	537

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Function: Support for the Folger Shakespeare Library and Corcoran Gallery of Art

(Dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) From Base
Folger Library	($)	174	167	174	---	-174
	(FTE-P)	(---)	(---)	(---)	(---)	(---)
Corcoran Gallery	($)	174	167	174	---	-174
	(FTE-P)	(---)	(---)	(---)	(---)	(---)
Total Requirements	($)	348	334	348	---	-348
	(FTE-P)	(---)	(---)	(---)	(---)	(---)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Folger Shakespeare Library and Corcoran Gallery of Art	348	-14	334

The reductions mandated by P.L. 99-177 will require a decrease in the level of support provided for the maintenance of buildings and grounds at these institutions.

Authorization

P.L. [illegible]

Objective

To provide these institutions with funds to maintain their buildings and grounds.

Base Program

Federal assistance to the Folger Shakespeare Library and the Corcoran Gallery of Art will provide maintenance and protection of these institutions. Both are listed on the National Register of Historic Places.

Statutory or Contractual Aid for Other Activities/Support for the Folger Shakespeare Library and Corcoran Gallery of Art

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	348	--	-348
(FTE-T)	(--)	(--)	(--)

The Service requests no funding for Federal assistance to the Folger Library and the Corcoran Gallery in fiscal 1987. These institutions are eligible to participate in a grant program administered by the National Endowment for the Humanities.

Distribution of decrease by object class

	Amount
Grants, subsidies, and contributions	-$348,000

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Subactivity: Mary McLeod Bethune National Historic Site

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Mary McLeod Bethune National Historic Site	($)	99	95	99	99	--
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Mary McLeod Bethune National Historic Site	99	-4	95

The reductions mandated by P.L. 99-177 will require a decrease in maintenance activities at the Mary McLeod Bethune National Historic Site.

Authorization

Public Law 97-329

Base program

Mary McLeod Bethune National Historic Site commemorates the life and achievements of this great American who founded the National Council of Negro Women, Inc., (N.C.N.W.) and the Bethune-Cookman College of Florida. Ms. Bethune served as an advisor to four Presidents.

The National Park Service is authorized by Public Law 97-329, dated October 15, 1982, to provide Federal financial assistance to the N.C.N.W. in a fifty-fifty matching grant to interpret and restore the Mary McLeod Bethune Memorial located in Lincoln Park, Washington, D.C.

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Subactivity: Martin Luther King, Jr., Center for Nonviolent Social Change

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Martin Luther King, Jr., Center for Non-Violent Social Change	($)	199	190	199	199	--
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Martin Luther King, Jr., Center for Non-Violent Social Change	199	-9	190

The reductions mandated by P.L. 99-177 will require a decrease in the level of support provided for the maintenance and operation of buildings and grounds at the Martin Luther King, Jr., Center for Non-Violent Social Change.

Authorization

Public Law 98-473

Base program

The Martin Luther King, Jr., Center for Nonviolent Social Change's Freedom Hall complex has been open to the public since January 1981. The Center currently pays all maintenance costs for the facility although heavy public visitation to the crypt and freedom walkway increase their costs substantially. Many of these visitors are coming to visit the adjacent national historic site and the crypt is a key focal point. Funds provided by the National Park Service help to defray maintenance costs incurred by the Center.

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Subactivity: Phillips Gallery, Arena Stage, National Building Museum, and National Capital Children's Museum

(Dollar amounts in thousands)

		FY 1986 Enacted To Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec(-) from Base
Phillips Gallery	($)	174	167	174	--	-174
	(FTE-T)	(--)		(--)	(--)	(--)
Arena Stage	($)	174	167	174	—	-174
	(FTE-T)	(--)		(--)	(--)	(--)
National Building Museum	($)	174	167	174	--	-174
	(FTE-T)	(--)		(--)	(--)	(--)
National Capital Children's Museum	($)	174	167	174	--	-174
	(FTE-T)	(--)		(--)	(--)	(--)
Total Requirements	($)	696	668	696	--	-696
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Phillips Gallery, Arena Stage, National Building Museum, and the National Capital Children's Museum	696	-28	668

The reductions mandated by P.L. 99-177 will require a decrease in the level of support provided for the maintenance of buildings and grounds at these institutions.

Authorization

Public Law 98-473

Statutory or Contractual Aid for Other Activities/Phillips Gallery, Arena Stage, National Building Museum, and National Capital Children's Museum

Base Program:

Phillips Gallery: The Phillips Gallery, founded in 1918 and entered into the National Register of Historic Places in 1973, was the first museum of modern art in the United States. Today, the museum houses a permanent collection and also presents special exhibitions, Sunday afternoon concerts (broadcasted to a national radio audience), and an internship program which allows local university and Smithsonian classes to meet at the site. The National Park Service grant is utilized to offset maintenance, security, and general operations costs at the site.

Arena Stage: Arena Stage, for 34 years a resident professional theatre company, is comprised of the 827-seat Arena Theatre, 514-seat fan shaped Kreeger Theatre, and the 180-seat Old Vat Room and other facilities necessary for scenery, costume, and prop construction. Federal financial assistance is provided through the National Park Service for support of general and administrative, maintenance and security, and program support.

National Building Museum: The National Building Museum was mandated by Congress in 1980 "...to celebrate and commemorate American building achievements..." by collecting and disseminating information, fostering educational programs, and displaying temporary and permanent exhibits concerning the building arts, as well as sponsoring or conducting research into the history of the building arts and their role in shaping our civilization. Funds from the grant by the National Park Service will be used for operational and administrative expenses.

National Capital Children's Museum: Since 1979, the National Capital Children's Museum has operated on a 3.2-acre site and houses three major permanent exhibit areas--communication, International Hall-Mexico, and changing environments--that combine arts, sciences, humanities, and new technologies through interactive hands-on experience for the visiting public. The Federal grant funds will be used for program support, maintenance and security support.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	696	--	-696
(FTE-T)	(--)	(--)	(--)

Continued support in fiscal 1987 for these activities is not being requested. These organizations are eligible to participate in a grant program administered by the National Endowment for the Arts in fiscal 1986.

Distribution of decrease by object class

	Amount
Grants, subsidies, and contributions	-$696,000

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Subactivity: William McKinley Tomb

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
William McKinley Tomb Restoration	($) (FTE-T))	447 (--)	427 (--)	447 (--)	-- (--)	-447 (--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
William McKinley Tomb Restoration	447	-20	-427

The reductions mandated by P.L. 99-177 will require adjustments in the planned level of restoration work.

Authorization

Public Law 99-190

Objectives

To provide funds for the restoration and rehabilitation of the William McKinley Tomb, Canton, Ohio.

Base Program

Funds appropriated for fiscal 1986 will allow the restoration of the tomb. The McKinley tomb is a national historic landmark and is located in Westlawn Cemetery overlooking the City of Canton, Ohio. The Stark County National Society acquired the circular, domed mausoleum in 1973. The National Park Service, through an agreement with the Historical Society, will undertake the rehabilitation of the tomb in fiscal 1986.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	447	--	-447
(FTE-T)	(--)	(--)	(--)

Funds provided in 1986 will allow repairs and rehabilitation of the tomb of our 25th President. The funds provided in 1986 are sufficient to complete this effort making unnecessary the appropriation of further funding for fiscal 1987.

Justification of Program and Performance

Activity: Statutory or Contractual Aid for Other Activities
Subactivity: Fisk University, Jubilee Hall

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Jubilee Hall-Exterior Restoration	($)	168	161	168	—	-168
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Jubilee Hall, Exterior Restoration	168	-7	161

The reductions mandated by P.L. 99-177 will decrease the funds available for the exterior restoration of Jubilee Hall at Fisk University. Planned work will be cut back accordingly.

Authorization

P.L. 99-190

Objectives

To provide Fisk University with sufficient funds to qualify for a matching funds grant under the Historic Preservation Fund Act provisions to make repairs to Jubilee Hall, a national historic landmark.

Base Program

Funds appropriated for fiscal 1986 will be made available through a subgrant administered by the Tennessee State Historical Commission in keeping with Historic Preservation Act procedures. Funds provided through this activity will be used in combination with a Historic Preservation Fund matching grant to complete the exterior restoration of the Hall.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	168	--	-168
(FTE-T)	(--)	(--)	(--)

Repairs to Jubilee Hall can be completed during fiscal 1986 making continued funding in 1987 unnecessary.

NATIONAL PARK SERVICE
Analysis by Subactivity

Activity: General Administration

(Dollars in thousands)

Subactivity	FY 1985 Actual	FY 1986 Enacted to date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase (+) or Decrease (-) 1987 Est. over 1987 Base
Central Office	$6,426	5,820	$5,570	$5,820	$5,820	--
Regional Office	16,839	14,993	14,348	14,993	14,993	--
Automatic Data Processing	4,789	4,827	4,619	4,827	4,827	--
Servicewide Administrative Support	6,601	6,561	6,279	7,161	7,161	--
General Services	392	390	373	390	390	--
Employees' Compensation Payment	3,950	4,345	4,158	5,355	5,355	--
Unemployment Compensation	8,500	7,892	7,553	7,892	7,892	--
GSA Space Rental	13,011	11,696	11,193	12,865	12,865	--
Executive Direction	6,585	6,544	6,263	6,544	6,544	--
Public Affairs	1,722	1,753	1,678	1,753	1,753	--
Total	68,815	64,821	62,034	67,600	67,600	--

Justification of Program and Performance

Activity: General Administration
Subactivity: Central Office Administration

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Central Office Administration	($)	5,820	5,570	5,820	5,820	--
	(FTE-T)	(154)	(154)	(154)	(154)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Central Office Administration	5,820	-250	5,570

The reduction mandated by P.L. 99-177 will primarily impact hiring decisions for this activity, which is personnel intensive. Vacant positions will be left unfilled, decreasing the timeliness and effectiveness of administrative support functions. To the extent possible, the purchase of equipment and related supplies will be deferred.

Authorization:

16 U.S.C. 1

Objectives

Provide and maintain an administrative system to ensure that personnel, financial, procurement and other administrative operations are performed in accordance with applicable laws and in such a way as to promote efficient performance of National Park Service operations.

Base Program

The Central Office administrative staff, located in Washington, D.C., provides coordination, direction, and administrative support for all park areas, Regional Offices and related organizations that make up the National Park System. The major administrative functions carried out by this staff include:

1. Programming and Budgeting - The formulation, justification, coordination and execution of the annual budget of the National Park Service.

2. Administrative Services - The analysis and evaluation of the effectiveness and efficiency of existing programs, administrative procedures and organizational structures; and the development and implementation of Servicewide contracting and property management policies and procedures.

3. Personnel Management - The development and implementation of personnel management programs, procedures, and standards relating to such areas as position management, wage administration, position classification, staffing and recruitment and employee relations. Also included is the cost of operating the Personnel Office for Washington Office staff.

4. Financial Management - The direction and maintenance of a Servicewide internal accounting system including central coordination and control of all financial and accounting reports to meet both external requirements and internal management needs.

5. Equal Employment Opportunity - The development, direction and evaluation of the Service's EEO Program in compliance with the Civil Rights Act of 1964 (78 Stat. 253; 42 USC 2000e), Executive Order 11478, and related directives, statutes and orders.

6. Special Assistant Policy Development - Staff assistance to the Director in all matters relating to policy development and management planning.

There are no increases requested for this program in fiscal 1987.

Justification of Program and Performance

Activity: General Administration
Subactivity: Regional Office Administration

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Regional Office	($)	14,993	14,348	14,993	14,993	--
Administration	(FTE-T)	(559)	(559)	(559)	(559)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Regional Office Administration	14,993	-645	14,348

The reductions mandated by P.L. 99-177 will require substantial reductions in travel and training and the deferral of most equipment purchases. Vacant positions will be left unfilled, decreasing the timeliness and effectiveness of administrative support functions in the Regional Offices.

Authorization

16 U.S.C. 1

Objectives

(1) To work closely with parks, especially smaller parks, to ensure that fiduciary responsibilities are met; (2) to advise Regional management on options concerning funding, staffing and other administrative questions; (3) to work with the Washington Office to ensure that policy directives are communicated to parks, and communication from parks are directed to Washington.

Base Program

Each Regional Office has an administrative staff to provide coordination and support on administrative matters affecting the parks in the Region. These personnel are responsible for all administrative support services including personnel and payroll management, contracting, programming and budgeting, property management, financial reporting and control and various other functions. Included also within the base program are related costs for supplies and materials and local telephone service. The reduction in the base amount reflects anticipated savings from the consolidation of certain administrative functions at support centers which centralization would service a broad geographic area.

There are no increases requested for this program in fiscal 1987.

Justification of Program and Performance

Activity: General Administration
Subactivity: Automatic Data Processing

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Automatic Data Processing	($)	4,827	4,619	4,827	4,827	--
	(FTE-T)	(73)	(73)	(73)	(73)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Automatic Data Processing	4,827	-208	4,619

The reductions mandated by P.L. 99-177 will require substantial cuts in training and travel and the deferral of most equipment purchases. Key vacancies will remain unfilled, decreasing the timeliness and effectiveness of administrative support functions in the Regional Offices.

Authorization

16 U.S.C. 1

Objectives

Provide management with timely information to support efficient operation of the National Park System.

Base Program

ADP services including analysis, design, development, and control of management information and administrative systems utilizing automatic data processing equipment. The Information and Data Systems Division coordinates the automatic data processing program of the Service. It provides technical guidance, assistance, and support to all elements of the Service in the areas of computer systems design, data retrieval, data communications, and ADP systems for Service operations. In addition, the division is responsible for operation of the Service's ADP systems and the development and application of data processing standards.

The ADP environment consists of the Washington Headquarters and Regional Offices, plus various other offices having remote data input and retrieval capabilities. The major computer service is currently being supplied by commercial and Government-owned computer installations, none of which is owned or operated by the National Park Service. Management information collection,

General Administration/Automatic Data Processing

processing and reporting capability are provided by ADP services for managers and other National Park Service personnel who have need for complete, current and reliable information for effective performance of Service functions. To maintain and operate ADP systems at a level required to supply ADP users with basic support, the following base level support is required:

1. Operation of the 64 production computer systems currently supporting the National Park Service.

2. Maintaining the production systems to ensure the correct execution of the programs and to provide for reliability of operations.

3. To provide control and safeguards to ensure proper system backup, security and disaster recovery capabilities and procedures.

4. To provide technical support in the selection, acquisition and approval of all ADP equipment and services.

5. To meet the mandatory reporting requirements set by GSA, GAO and the Department of the Interior.

6. Maintenance of ADP standards throughout the National Park Service.

7. To plan for the design and installation of all NPS Servicewide data bases and to provide the necessary security and control to ensure the integrity of such data bases.

8. To develop an effective plan for controlling existing resources and for establishing the direction of ADP development within the National Park Service.

9. To provide a minimum level technical support service to field and other organizational units for the resolution of their specific problems and inquiries; i.e., consultation/guidance in system use; resolution of file, program and system problems; programming language assistance; and ADP training.

The automated data systems currently maintained provide the Service with important and timely information on virtually every major activity and operation necessary for the efficient administration of the National Park System. In addition, computer production systems are in place that assist in meeting the many reporting requirements of the Department, Treasury, and other Federal agencies.

There are no increases requested for this program in fiscal 1987.

Justification of Program and Performance

Activity: General Administration
Subactivity: Servicewide Administrative Support

(Dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Estimated [illegible]	FY 1987 [illegible]	FY 1987 [illegible]	Inc. (+) Dec. (-) From Base
Servicewide Administrative Support	[illegible] ([illegible])	[illegible] ([illegible])	[illegible] ([illegible])	[illegible] ([illegible])	[illegible] ([illegible])	[illegible] ([illegible])

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 [illegible]
Servicewide Administrative Support	[illegible]	[illegible]	[illegible]

Amounts budgeted under this subactivity are based on estimated billings for various administrative support services. Although steps will be taken to encourage savings in postage and FTS use, the reductions mandated by P.L. 99-177 will likely result in the need to reprogram funds from other activities to cover actual costs for administrative services.

Authorization

16 U.S.C. 1

Objectives

(1) To share Servicewide telephone and postal services; (2) to pay for the [illegible] share of interagency services such as the Departmental library, [illegible] and [illegible] inspections, and for certain activities conducted on an interdepartmental basis such as Federal Information Centers; (3) to provide Servicewide printing needs.

Base Program

Funds budgeted under this subactivity cover the cost of a number of general administrative services as shown below:

Service	1987 Base
Federal Telecommunications System (FTS)	[illegible]
Postage	[illegible]
Inter-Departmental Services	[illegible]
Printing	[illegible]
Total	[illegible]

General Administration/Servicewide Administrative Support

The fiscal 1987 base includes an increase of $600,000 ($400,000 for FTS and $200,000 for postage) over the 1986 budget to cover the estimated increase of charges for these items.

Justification of Program and Performance

Activity: General Administration
Subactivity: General Services

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
General Services	($)	390	373	390	390	—
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
General Services	390	-17	373

Amounts budgeted under this subactivity are based on estimated billings for various general administrative services for the Washington Headquarters Office of the National Park Service. Although steps will be taken to encourage savings in copy machine and telecopier use, the reductions mandated by P.L. 99-177 will likely result in the need to reprogram funds from other activities to cover actual costs for these services.

Authorization

16 U.S.C. 1

Objectives

Provide various administrative services primarily to facilitate Washington Office operations.

Base program

A number of services are provided which facilitate and support Washington Office operations. These services include shuttle bus services between the Main Interior Building and the L Street Offices, copy machine rental and supplies, telecopier rental and supplies, printing expenses for Golden Age, Golden Access, and Golden Eagle Passports, and operating expenses for the employee Health Unit at the Service's L Street offices in Washington, D.C.

There are no increases requested for this program in 1987.

Justification of Program and Performance

Activity: General Administration
Subactivity: Employees' Compensation Payments

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Employees' Compen-	($)	4,345	4,158	5,355	5,355	—
sation Payments	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Employees Compensation Fund	4,345	-187	4,158

Amounts budgeted under this subactivity are based on actual billings for the National Park Service. The reductions mandated by P.L. 99-177 will likely result in the need to reprogram funds from other activities to cover actual costs.

Authorization

16 U.S.C. 1

Objectives

To provide financial compensation to National Park Service employees in the event of a job related injury.

Base Program

The National Park Service makes payments to the employees' compensation fund, Employment Standards Administration, to cover the cost of compensation claims awarded to Service employees during the previous fiscal year. The fiscal 1987 request includes an estimate increase in such payments of $1,010,000 over the 1986 budget.

Justification of Program and Performance

Activity: General Administration
Subactivity: Unemployment Compensation for Federal Employees

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Unemployment Compensation for Federal	($)	7,892	7,553	7,892	7,892	--
Employees	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Unemployment Compensation for Federal Employees	7,892	-339	7,553

Amounts budgeted under this subactivity are based on actual billings for the National Park Service. The reductions mandated by P.L. 99-177 will likely result in the need to reprogram funds from other activities to cover actual costs.

Authorization

Public Law 96-499

Objective

To provide unemployment compensation to qualifying former personnel.

Base Program

The Omnibus Reconciliation Act of 1980 (P.L. 96-499) requires that all unemployment benefits paid to former Federal employees, based on Federal service performed after December 31, 1980, be reimbursed to the Federal employees' compensation account of the unemployment trust fund by each Federal agency. At this time billing information is not available at the bureau level. The Department has distributed the total cost among affected bureaus on the basis of total separations. The level of separations for the National Park Service is the highest in the Department because of the large number of seasonal staff.

Justification of Program and Performance

Activity: General Administration
Subactivity: GSA Space Rental

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
GSA Space Rental	($)	11,696	11,193	12,865	12,865	--
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
GSA Space Rental	11,696	-503	11,193

Amounts budgeted under this subactivity are based on actual billings for the National Park Service. The reductions mandated by P.L. 99-177 will likely result in the need to reprogram funds from other activities to cover actual costs.

Authorization

16 U.S.C. 1

Objectives

To provide the office space and related services for the National Park Service in GSA-owned and operated buildings.

Base Program

The Service makes payments to the General Services Administration (GSA) for office space and related services in GSA-owned buildings. The standard level user charges paid by the Service are determined by GSA and billed on an annual basis. The base amount includes additional funds to cover rate increases anticipated for 1987 because of changes in the type of space for which the Service is billed.

Justification of Program and Performance

Activity: General Administration
Subactivity: Executive Direction

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Executive Direction	($)	6,544	6,263	6,544	6,544	—
	(FTE-T)	(146)	(146)	(146)	(146)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Executive Direction	6,544	-281	6,263

The reductions mandated by P.L. 99-177 will require decreases in program related travel. Vacant positions will be left unfilled.

Authorization

16 U.S.C. 1

Objective

To provide effective executive level management for the National Park System.

Base Program

These funds are used to pay the salaries and expenses of senior level managers in Washington and the 10 Regional Offices. The executives are responsible for overall management of the National Park System. They establish operating guidelines and objectives, coordinate with other public and private organizations, efficiently manage staff and funds, and ensure compliance with legislation, Departmental directives, and regulations affecting the operation of the National Park System. There are no increases requested for this program in fiscal 1987.

Justification of Program and Performance

Activity: General Administration
Subactivity: Public Affairs

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Public Affairs	($)	1,753	1,678	1,753	1,753	--
	(FTE-T)	(43)	(43)	(43)	(43)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Public Affairs	1,753	-75	1,678

The reductions mandated by P.L. 99-177 will require decreases in travel and training and the purchase of supplies. Vacant positions will be left unfilled, which will have an adverse impact on the Service's ability to respond in a timely manner to requests from congressional staff, the news media, and the general public.

Authorization

16 U.S.C. 1	The National Park Service Organic Act

Objectives

(1) To provide the general public, the news media, Members of Congress, and other interested officials with accurate information about the National Park System, including visitor facilities, park attractions, and the management policies of the National Park Service. (2) To promptly respond to requests for information made under the Freedom of Information Act.

Base Program

The National Park Service is an exceptionally visible public agency. It administers Federally owned properties which the public seems to appreciate and use in ever-increasing numbers. Consequently, there is a parallel demand for information about the Service and the parks it administers. The Public Affairs Program of the National Park Service exists to respond to this demand.

Through public affairs staffs located in Washington and the Regional Offices, the Service informs the public, in advance if possible, of the diversity of attractions, facilities, services, and programs available in 337 units of the National Park System. As most of the information sought is of greatest value to prospective park visitors while planning personal travel itineraries and vacation schedules, timeliness is a critical factor in responses.

General Administration/Public Affairs

The public affairs staff responds to more than a million information requests annually from the general public and approximately 25,000 requests from the news media, the Congress, and other Federal agencies. This staff is also responsible for reviewing and assembling information to satisfy about 420 Freedom of Information requests annually.

There are no increases requested for this program in 1987.

Summary of Requirements by Object Class
(Dollar Amounts in Thousands)

Appropriation: Operation of the National Park System		1937 Base		1987 Estimate		Inc. (+) or Dec. (-)	
		FTE	Amount	FTE	Amount	FTE	Amount
Object Class:							
11.	Personnel compensation:						
11.1	Permanent full-time equivalencies	10,751	262,124	10,663	260,395	-88	-1,730
11.3	Other than permanent full-time equivalencies....................	3,898	65,489	3,643	61,498	-255	-3,991
11.5	Other personnel compensation.......	--	17,220	--	16,964	--	-256
11.9	Total personnel compensation.......	14,649	344,833	14,306	338,856	-343	-5,977
	Other Objects:						
12.1	Personnel benefits.................		43,529		43,038		-491
13.0	Benefits for former personnel......		8,850		8,850		--
21.0	Travel and transportation of persons		12,226		12,042		-184
22.0	Transportation of things...........		9,577		9,678		+101
23.1	Standard level user charges........		11,708		11,708		--
23.2	Rental payments to others..........		1,157		1,157		--
23.3	Communications, utilities, and other charges....................		28,242		27,457		-785
24.0	Printing and reproduction..........		4,488		1,807		-2,681
25.0	Other services.....................		87,863		69,153		-18,710
26.0	Supplies and materials.............		45,138		44,153		-985
31.0	Equipment..........................		21,791		22,112		+321
32.0	Lands and structures...............		5,741		5,741		--
41.0	Grants, subsidies and contributions		2,530		503		-2,027
42.0	Insurance claims and indemnities...		219		219		--
43.0	Interest and dividends.............		1		1		--
44.0	Refunds............................		5		5		--
	Total requirements.................	14,649	627,900	14,306	596,482	-343	-31,418

Funds requested under the "Operation of the National Park System" appropriation are distributed by park area, office, and program as shown in the following pages. The full-time equivalent (FTE-T) shown for fiscal 1984, 1985, and 1986 are those funded from all accounts.

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
ABRAHAM LINCOLN BIRTHPLACE NHS	278,200	12	290,400	12		290,400	12	261	117
ACADIA NP	1,530,000	51	1,545,100	55		1,545,100	55	3,900	40,151
ADAMS NHS	423,900	14	428,000	16		428,000	16	36	10
AGATE FOSSIL BEDS NM	106,800	5	105,200	5		105,200	5	21	3,055
ALIBATES FLINT QUARRIES NM	34,100	1	35,000	1		35,000	1	2	1,371
ALLEGHENY PORTAGE RAILROAD NHS	475,200	16	479,900	16		479,900	16	65	1,135
AMERICAN MEMORIAL PARK	79,300	3	79,100	3		79,100	3	0	0
AMISTAD NRA	1,115,800	36	1,125,000	36		1,125,000	36	1,101	57,292
ANDERSONVILLE NHS	487,100	18	496,300	18		496,300	18	111	476
ANDREW JOHNSON NHS	255,100	10	258,200	10		258,200	10	73	17
ANIAKCHAK NM & PRESERVE	67,300	2	66,000	2		66,000	2	0	615,000
ANTIETAM NB	724,700	24	687,200	26		687,200	26	573	3,256
APOSTLE ISLANDS NL	1,376,100	31	1,075,700	30		1,075,700	30	120	67,885
APPOMATTOX COURT HOUSE NHP	410,900	17	415,100	17		415,100	17	288	1,325
ARCHES NP	327,500	15	329,000	13		329,000	13	361	73,379
ARKANSAS POST NMEM	175,800	5	176,200	5		176,200	5	57	389
ASSATEAGUE ISLAND NS	1,331,200	46	1,342,700	45		1,342,700	45	2,307	39,631
AZTEC RUINS NM	233,000	8	235,900	8		235,900	8	58	27

ONPS, PARK MANAGEMENT: PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
BADLANDS NP	953,900	34	962,900	34		962,900	34	974	243,302
BALTIMORE-WASHINGTON PARKWAY	491,600	13	394,600	8		394,600	8	0	0
BANDELIER NM	994,300	35	1,001,700	35		1,001,700	35	234	36,971
BENT'S OLD FORT NHS	456,800	18	468,100	17		468,100	17	41	800
BERING LAND BRIDGE NAT'L PRESERVE	227,500	6	226,000	4		226,000	4	0	2,770,000
BIG BEND NP & RIO GRANDE WILD AND SCENIC RIVER	2,500,700	86	2,524,900	85		2,524,900	85	216	745,016
BIG CYPRESS NATIONAL PRESERVE	819,600	34	870,100	35		870,100	35	0	570,000
BIG HOLE NB	161,700	4	162,500	4		162,500	4	34	656
BIG SOUTH FORK N RIVER & RA	752,300	25	684,300	27		684,300	27	0	122,960
BIG THICKET NATIONAL PRESERVE	1,032,400	35	1,041,600	34		1,041,600	34	85	85,854
BIGHORN CANYON NRA	1,326,200	37	1,330,100	36		1,330,100	36	468	120,296
BISCAYNE NP	1,055,600	39	1,027,900	34		1,027,900	34	433	173,313
BLACK CANYON OF THE GUNNISON NM	315,000	11	323,200	11		323,200	11	264	20,762
BLUE RIDGE PARKWAY	6,893,000	247	7,003,300	246		7,003,300	246	20,924	82,117
BOOKER T WASHINGTON NM	255,100	11	260,400	11		260,400	11	22	224
BOSTON AFRICAN AMERICAN NHS	110,200	5	112,000	5		112,000	5	0	0
BOSTON NHP	3,490,500	125	3,916,000	125		3,916,000	125	1,593	41

NATL. PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
BRYCE CANYON NP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
BUCK ISLAND REEF NM	[illegible]	5	[illegible]	5		[illegible]	5	[illegible]	[illegible]
BUFFALO NATIONAL RIVER	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CABRILLO NM	[illegible]	17	[illegible]	17		[illegible]	17	[illegible]	[illegible]
CANAVERAL NS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CANYON DE CHELLY NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CANYONLANDS NP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CAPE COD NS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CAPE HATTERAS NS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CAPE KRUSENSTERN NM	[illegible]	1	[illegible]	1		[illegible]	1	[illegible]	[illegible]
CAPE LOOKOUT NS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CAPITOL REEF NP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CAPULIN MOUNTAIN NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CARL SANDBURG HOME NHS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CARLSBAD CAVERNS NP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CASA GRANDE NM & HOHOKAM PIMA NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CASTILLO DE SAN MARCOS NM & FORT MATANZAS NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

NPS, PARK MANAGEMENT FUND AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/P	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/P	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/P	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
CONGAREE SM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CRATER LAKE NP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CRATERS OF THE MOON NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CUMBERLAND GAP NHP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CUMBERLAND ISLAND NS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CURECANTI NRA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CUSTER BATTLEFIELD NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
CUYAHOGA VALLEY NRA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
DE SOTO NMEM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
DEATH VALLEY NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
DELAWARE WATER GAP NRA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
DENALI NP & PRESERVE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DEVILS POSTPILE NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
DEVILS TOWER NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
DINOSAUR NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
EBEY'S LANDING NAT'L HIST RESERVE	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
EDGAR ALLAN POE NHS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
EDISON NHS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

OPS. PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
EFFIGY MOUNDS NM	262,000	10	262,100	10		262,100	10	92	1,476
EISENHOWER NHS	637,400	32	645,800	31		645,800	31	138	690
EL MORRO NM	198,900	7	201,100	7		201,100	7	53	1,279
ELEANOR ROOSEVELT NHS	250,500	6	252,200	10		252,200	10	4	181
ELLIS ISLAND	613,000	23	623,000	23	3,319,000	3,942,000	70	0	0
EUGENE O'NEILL NHS	125,000	4	136,000	4		136,000	4	2	13
EVERGLADES NP	6,423,900	201	6,463,100	203		6,463,100	203	688	1,398,938
FEDERAL HALL NMEM	275,500	8	276,500	6		276,500	6	243	0
FIRE ISLAND NS	1,766,800	60	1,776,600	62		1,776,600	62	650	19,579
FLORISSANT FOSSIL BEDS NM	202,300	9	203,600	7		203,600	7	90	5,998
FORD'S THEATRE NHS	252,700	18	251,700	18		251,700	18	795	0
FORT CAROLINE NMEM	235,000	10	241,200	10		241,200	10	164	138
FORT CLATSOP NMEM	275,500	9	276,200	11		276,200	11	157	125
FORT DAVIS NHS	375,600	15	378,900	15		378,900	15	68	460
FORT DONELSON NMP	478,100	19	483,700	19		483,700	19	1,047	552
FORT FREDERICA NM	320,600	13	323,800	13		323,800	13	226	216
FORT JEFFERSON NM	233,000	6	234,600	6		234,600	6	20	64,700

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
FORT LARAMIE NHS	493,400	21	496,400	19		496,400	19	84	832
FORT LARNED NHS	330,600	13	328,900	12		328,900	12	63	718
FORT MCHENRY NM & HISTORIC SHRINE	664,000	24	674,200	24		674,200	24	810	43
FORT NECESSITY NB	450,800	18	454,100	17		454,100	17	145	903
FORT POINT NHS	198,200	9	199,600	9		199,600	9	1,031	29
FORT PULASKI NM	466,000	16	474,300	16		474,300	16	438	5,623
FORT RALEIGH NHS	181,600	7	184,700	7		184,700	7	274	157
FORT SCOTT NHS	334,800	15	335,500	14		335,500	14	80	17
FORT SMITH NHS	237,000	9	239,000	10		239,000	10	131	73
FORT STANWIX NM	342,400	16	346,600	16		346,600	16	68	16
FORT SUMTER NM	660,900	23	670,400	23		670,400	23	260	189
FORT UNION NM	257,100	10	262,100	10		262,100	10	13	721
FORT UNION TRADING POST NHS	131,300	4	130,800	4		130,800	4	17	434
FORT VANCOUVER NHS	492,500	17	497,000	17		497,000	17	270	209
FOSSIL BUTTE NM	117,900	4	118,700	4		118,700	4	17	8,198
FREDERICK LAW OLMSTED NHS	442,400	15	449,300	15		449,300	15	3	2
FREDERICKSBURG/SPOTSYLVANIA NMP	1,381,600	55	1,397,300	54		1,397,300	54	910	5,921
FRIENDSHIP HILL NHS	229,300	3	227,600	3		227,600	3	13	675

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
GATES OF THE ARCTIC NP & PRESERVE	752,500	12	705,700	13		705,700	13	4	8,440,000
GATEWAY NRA	12,056,900	355	11,700,400	383		11,700,400	383	8,672	26,311
GENERAL GRANT NMEM	95,100	5	96,000	4		96,000	4	69	1
GEORGE ROGERS CLARK NHP	338,500	12	344,000	12		344,000	12	123	25
GEORGE WASHINGTON BIRTHPLACE NM	529,200	20	534,700	20		534,700	20	156	538
GEORGE WASHINGTON CARVER NM	285,800	12	286,300	12		286,300	12	131	210
GEORGE WASHINGTON MEMORIAL PARKWAY	5,617,200	155	5,107,700	152		5,107,700	152	10,653	7,288
GETTYSBURG NMP	2,268,100	69	2,282,000	69		2,282,000	69	1,314	3,886
GILA CLIFF DWELLINGS NM	135,600	--	140,500	--		140,500	--	35	533
GLACIER BAY NP & PRESERVE	1,092,400	26	1,080,400	24		1,080,400	24	135	3,280,198
GLACIER NP	5,420,800	190	5,465,000	178		5,465,000	178	1,617	1,013,572
GLEN CANYON NRA	3,602,300	117	3,601,700	117		3,601,700	117	2,166	1,236,880
GLORIA DEI CHURCH NHS	22,600	1	23,200	1		23,200	1	0	4
GOLDEN GATE NRA	9,395,400	284	8,991,600	284	85,000	9,076,600	284	17,854	73,112
GOLDEN SPIKE NHS	405,000	13	409,100	13		409,100	13	194	2,735
GRAND CANYON NP	7,027,900	241	7,129,600	240		7,129,600	240	2,815	1,218,375
GRAND PORTAGE NM	384,700	15	386,700	14		386,700	14	47	710

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
GRAND TETON NP	3,969,100	141	3,993,400	133		3,993,400	133	2,155	310,521
GRANT-KOHRS RANCH NHS	431,300	18	436,400	16		436,400	16	23	1,499
GREAT SAND DUNES NM	387,400	13	389,200	15		389,200	15	187	38,662
GREAT SMOKY MOUNTAINS NP	6,861,800	260	6,887,900	253		6,887,900	253	14,261	520,269
GREENBELT PARK	461,200	15	541,200	18		541,200	18	475	1,176
GUADALUPE MOUNTAINS NP	758,300	29	771,300	29		771,300	29	148	76,293
GUILFORD COURTHOUSE NMP	301,300	11	304,700	11		304,700	11	1,184	220
GULF ISLANDS NS	2,984,000	101	2,954,300	99		2,954,300	99	9,928	139,775
HALEAKALA NP	836,200	30	944,400	38		944,400	38	1,189	28,655
HAMILTON GRANGE NMEM	67,000	3	68,700	5		68,700	5	17	1
HAMPTON NHS	267,900	12	270,400	11		270,400	11	73	59
HARPERS FERRY NHP	1,631,000	64	1,699,900	64		1,699,900	64	721	2,238
HARRY S TRUMAN NHS	344,100	12	357,700	13		357,700	13	122	1
HAWAII VOLCANOES NP	1,594,700	66	1,594,500	64		1,594,500	64	1,575	229,177
HERBERT HOOVER NHS	527,600	19	525,100	19		525,100	19	240	187
HISTORIC CAMDEN	59,300	--	--	--		--	--	--	--
HOME OF FRANKLIN D ROOSEVELT NHS	735,400	31	740,000	18		740,000	18	213	290
HOMESTEAD NM OF AMERICA	251,300	9	250,500	8		250,500	8	22	195

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
HOPEWELL FURNACE NHS	459,300	22	465,700	22		465,700	22	158	848
HORSESHOE BEND NMP	240,000	10	243,600	9		243,600	9	503	2,040
HOT SPRINGS NP	1,135,900	43	1,150,100	43		1,150,100	43	5,315	5,836
HOVENWEEP NM	66,900	3	73,000	2		73,000	2	15	785
HUBBELL TRADING POST NHS	298,300	12	301,400	13		301,400	13	124	160
INDEPENDENCE NHP	6,783,000	218	6,825,000	217	353,000	7,178,000	217	4,913	45
INDIANA DUNES NL	3,765,900	101	3,729,400	100		3,729,400	100	2,164	12,870
ISLE ROYALE NP	1,607,500	56	1,607,900	52		1,607,900	52	18	571,790
JEAN LAFITTE NHP & PRESERVE	1,422,100	47	1,544,600	48		1,544,600	48	1,036	20,000
JEFFERSON NAT'L EXPANSION MEM NHS	2,892,500	102	2,902,200	102		2,902,200	102	2,018	191
JEWEL CAVE NM	261,800	12	261,600	10		261,600	10	129	1,274
JOHN D ROCKEFELLER JR MEMORIAL PKWY	214,700	9	218,200	8		218,200	8	1,093	23,777
JOHN DAY FOSSIL BEDS NM	415,800	13	415,100	14		415,100	14	101	14,014
JOHN F KENNEDY NHS	86,200	6	88,200	5		88,200	5	18	--
JOHN MUIR NHS	225,100	10	220,400	10		220,400	10	35	9
JOHNSTOWN FLOOD NMEM	143,900	3	143,800	3		143,800	3	53	163
JOSHUA TREE NM	1,378,300	47	1,346,700	50		1,346,700	50	652	559,955

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
KALAUPAPA NHP	189,300	7	193,800	7		193,800	7	0	10,902
KALOKO-HONOKOHAU NHP	207,200	3	205,700	3		205,700	3	0	1,161
KATMAI NP & PRESERVE	672,900	14	672,400	12		672,400	12	25	4,090,000
KENAI FJORDS NP	289,100	6	289,200	6		289,200	6	37	670,000
KENNESAW MOUNTAIN NBP	560,400	18	566,300	18		566,300	18	2,312	2,884
KINGS MOUNTAIN NMP	350,500	13	353,200	13		353,200	13	419	3,945
KLONDIKE GOLD RUSH NHP	778,600	17	777,100	14		777,100	14	85	13,191
KLONDIKE GOLD RUSH NHP (SEATTLE)	162,500	7	163,900	7		163,900	7	62	0
KNIFE RIVER INDIAN VILLAGE NHS	132,100	6	133,200	5		133,200	5	14	1,293
KOBUK VALLEY NP	281,100	6	328,200	6		328,200	6	8	1,750,000
LAKE CLARK NP & PRESERVE	671,400	9	667,900	9		667,900	9	18	4,045,000
LAKE MEAD NRA	5,414,500	165	5,529,300	165		5,529,300	165	7,092	1,496,601
LAKE MEREDITH RA	1,000,300	34	1,008,200	33		1,008,200	33	1,660	44,978
LASSEN VOLCANIC NP	1,860,200	60	1,890,300	59		1,890,300	59	459	106,372
LAVA BEDS NM	573,600	22	574,800	22		574,800	22	95	46,560
LEHMAN CAVES NM	250,800	12	262,800	11		262,800	11	37	640
LINCOLN BOYHOOD NMEM	406,800	14	404,700	14		404,700	14	237	200
LINCOLN HOME NHS	810,000	29	805,700	28		805,700	28	433	12

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ONPS. PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
LONGFELLOW NHS	295,800	11	299,700	12		299,700	12	18	2
LOWELL NHP	2,399,300	78	2,677,900	79		2,677,900	79	691	136
LYNDON B JOHNSON NHP	1,549,600	54	1,564,800	53		1,564,800	53	295	1,478
MAGGIE L WALKER NHS	141,300	4	141,700	4		141,700	4	1	1
MAMMOTH CAVE NP	2,772,100	113	2,805,300	113		2,805,300	113	1,691	52,419
MANASSAS NBP	558,200	20	493,700	21		493,700	21	720	4,513
MARTIN LUTHER KING JR NHS	671,900	22	680,700	22		680,700	22	347	23
MARTIN VAN BUREN NHS	476,200	15	482,400	18		482,400	18	6	40
MESA VERDE NP	2,471,800	75	2,480,600	70		2,480,600	70	643	52,085
MINUTE MAN NHP	860,800	35	868,500	34		868,500	34	858	749
MONOCACY NB	20,500	--	20,600	--		20,600	--	0	1,647
MONTEZUMA CASTLE NM & TUZIGOOT NM	475,100	24	495,500	23		495,500	23	623	1,667
MOORES CREEK NBP	183,800	7	185,800	6		185,800	6	40	87
MORRISTOWN NHP	926,600	33	928,600	32		928,500	32	633	1,676
MOUND CITY GROUP NM	280,000	9	280,000	9		280,000	9	39	270
MOUNT RAINIER NP	5,206,500	151	5,227,700	155		5,227,700	155	1,625	235,404
MOUNT RUSHMORE NMEM	826,200	31	833,600	29		833,600	29	2,172	1,278

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
MUIR WOODS NM	140,200	7	141,300	7		141,300	7	1,367	554
NATCHEZ TRACE PARKWAY, BRICES CROSSROADS NB & TUPELO NB	4,799,900	140	4,810,800	138		4,810,800	138	19,461	50,191
NATIONAL CAPITAL PARKS-CENTRAL	10,696,800	264	11,819,000	348		11,819,000	348	20,058	6,902
NATIONAL CAPITAL PARKS-EAST	5,515,000	170	5,358,900	173		5,358,900	173	409	4,613
NATURAL BRIDGES NM	191,500	7	193,200	6		193,200	6	61	7,791
NAVAJO NM	291,300	11	295,300	11		295,300	11	68	360
NEW RIVER GORGE NATIONAL RIVER	583,700	13	580,000	13		580,000	13	261	62,024
NEZ PERCE NHP	456,900	13	462,700	15		462,700	15	258	2,109
NINETY SIX NHS	161,700	6	163,400	6		163,400	6	9	989
NOATAK NATIONAL PRESERVE	206,600	3	204,100	3		204,100	3	10	6,560,000
NORTH CASCADES NP, LAKE CHELAN NRA & ROSS LAKE NRA	2,448,600	81	2,450,600	72		2,450,600	72	640	684,245
OBED WILD & SCENIC RIVER	136,600	4	137,700	4		137,700	4	0	5,005
OCMULGEE NM	390,700	14	376,300	14		376,300	14	198	683
OLYMPIC NP	5,042,600	157	5,138,900	157		5,138,900	157	3,082	914,817
OREGON CAVES NM	199,000	7	196,300	6		196,300	6	94	488
OREGON NHT	14,900	--	14,500	--		14,500	--	0	0
ORGAN PIPE CACTUS NM	473,300	17	495,400	17		495,400	17	175	330,689

OMPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
OZARK NATIONAL SCENIC RIVERWAYS	2,724,700	95	2,715,400	89		2,715,400	89	1,898	80,788
PADRE ISLAND NS	1,105,700	35	1,107,900	35		1,107,900	35	664	130,697
PALO ALTO BATTLEFIELD NHS	21,100	1	22,000	--		22,000	--	0	50
PEA RIDGE NMP	284,200	10	286,200	10		286,200	10	120	4,300
PECOS NM	244,000	9	245,700	11		245,700	11	45	365
PERRY'S VICTORY & I P MEMORIAL	293,800	10	294,400	10		294,400	10	155	25
PETERSBURG NB	883,700	28	889,800	28		889,800	28	722	2,744
PETRIFIED FOREST NP	1,231,200	52	1,250,100	49		1,250,100	49	734	93,493
PICTURED ROCKS NL	831,900	27	835,600	25		835,600	25	409	72,899
PINNACLES NM	648,800	22	643,900	22		643,900	22	188	16,265
PIPE SPRING NM	176,700	7	178,800	7		178,800	7	30	40
PIPESTONE NM	295,800	10	293,300	10		293,300	10	130	282
PISCATAWAY PARK	315,000	--	310,800	--		310,800	--	61	0
POINT REYES NS	1,817,200	67	1,896,000	65		1,896,000	65	1,998	71,046
PRESIDENT'S PARK	803,000	31	831,100	34		831,100	34	0	0
PRINCE WILLIAM FOREST PARK	1,427,200	44	1,249,100	44		1,249,100	44	433	18,572
PUUHONUA O HONAUNAU NHP	459,600	17	466,300	17		466,300	17	395	182

OPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
PUUKOHOLA HEIAU NHS	150,300	6	152,800	6		152,800	6	47	78
RAINBOW BRIDGE NM	81,200	--	80,400	--		80,400	--	260	160
REDWOOD NP	4,627,900	133	4,597,800	132		4,597,800	132	580	110,178
RICHMOND NBP	558,800	22	561,300	22		561,300	22	355	771
ROCK CREEK PARK	2,650,500	80	2,560,200	83		2,560,200	83	14,306	1,754
ROCKY MOUNTAIN NP	4,631,000	160	4,679,000	156		4,679,000	156	2,422	265,193
ROGER WILLIAMS NMEM	128,700	6	131,300	6		131,300	6	15	5
RUSSELL CAVE NM	133,600	6	135,300	6		135,300	6	23	310
SAGAMORE HILL NHS	459,300	17	458,500	16		458,500	16	121	78
SAGUARO NM	693,500	25	735,400	31		735,400	31	2,059	83,574
SAINT CROIX ISLAND NM	43,000	2	43,800	2		43,800	2	0	35
SAINT PAUL'S CHURCH NHS	176,000	--	174,300	--		174,300	--	0	6
SAINT-GAUDENS NHS	248,900	12	247,400	11		247,400	11	32	148
SALEM MARITIME NHS	334,700	14	365,300	15		365,300	15	747	9
SALINAS NM	306,300	14	310,000	14		310,000	14	29	1,077
SAN ANTONIO MISSIONS NHP	811,500	30	815,600	30		815,600	30	209	477
SAN JUAN ISLAND NHP	216,700	8	219,200	8		219,200	8	102	1,752
SAN JUAN NHS	1,127,900	44	1,157,400	46		1,157,400	46	2,147	75

OPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
SANTA MONICA MOUNTAINS NRA	2,081,500	71	1,803,200	62		1,803,200	62	526	150,000
SARATOGA NHP	573,300	22	579,400	20		579,400	20	267	3,389
SAUGUS IRON WORKS NHS	286,100	14	293,100	15		293,100	15	78	9
SCOTTS BLUFF NM	272,100	9	272,200	9		272,200	9	179	2,997
SEQUOIA NP & KINGS CANYON NP	6,255,500	219	6,136,300	220		6,136,300	220	1,829	864,119
SHENANDOAH NP	4,767,500	181	4,820,000	180		4,820,000	180	1,972	195,227
SHILOH NMP	568,000	22	569,100	22		569,100	22	485	3,848
SITKA NHP	418,500	9	420,000	8		420,000	8	124	107
SLEEPING BEAR DUNES NL	1,482,300	56	1,479,000	50		1,479,000	50	867	71,132
SPRINGFIELD ARMORY NHS	420,600	14	416,600	14		416,600	14	16	55
ST CROIX NATIONAL SCENIC RIVERWAY & LOWER ST CROIX NATIONAL SCENIC RIVERWAY	1,200,900	38	1,199,200	37		1,199,200	37	444	78,258
STATUE OF LIBERTY NM	1,441,700	67	1,454,500	51		1,454,500	51	289	58
STONES RIVER NB	273,200	11	276,900	11		276,900	11	179	351
THADDEUS KOSCIUSZKO NMEM	57,000	3	58,700	3		58,700	3	7	0
THEODORE ROOSEVELT BIRTHPLACE NHS	120,400	6	123,700	5		123,700	5	19	0
THEODORE ROOSEVELT INAUGURAL NHS	25,700	--	28,600	--		28,600	--	20	1

DEPT. PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1986	FY 1986 FTE-P	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE-P	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE-P	VISITOR USE FY 1986 THOUSANDS	TOTAL GROSS ACREAGE
THEODORE ROOSEVELT NP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
THOMAS STONE NHS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
TIMPANOGOS CAVE NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
TONTO NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
TUMACACORI NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
TUSKEGEE INSTITUTE NHS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
U.S.S. ARIZONA MEMORIAL	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
UPPER DELAWARE SCENIC & REC RIVER	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
VALLEY FORGE NHP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
VANDERBILT MANSION NHS	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
VICKSBURG NMP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
VIRGIN ISLANDS NP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
VOYAGEURS NP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
WALNUT CANYON NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
WAR IN THE PACIFIC NHP	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
WHISKEYTOWN NRA	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
WHITE HOUSE	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]
WHITE SANDS NM	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]

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ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T	VISITOR USE FY 1985 THOUSANDS	TOTAL GROSS ACREAGE
OTHER FIELD OFFICES, ETC:									
ANCHORAGE INTERAGENCY VIS CTR (AR)	71,200	1	70,100	1		70,100	1		
FACILITY MANAGEMENT (NCR)	2,434,300	95	2,399,300	90		2,399,300	90		
FAIRBANKS INTERAGENCY VIS CTR (AR)	100,300	1	98,700	3		98,700	3		
ILLINOIS AND MICHIGAN CANAL	--	--	313,000	3		313,000	3		
MANHATTAN SITES (HQTRS) (NAR)	389,300	15	390,800	14		390,800	14		
PACIFIC AREA DIRECTOR (WR)	639,300	12	603,000	11		603,000	11		
SOUTHERN ARIZONA GROUP (WR)	624,000	15	565,800	14		565,800	14		
SPECIAL EVENTS (NCR)	530,400	11	451,000	11		451,000	11		
UTAH STATE DIRECTOR (RMR)	158,200	3	92,900	3		92,900	3		
SUBTOTAL	4,947,000	153	4,984,600	150		4,984,600	150		
TRANSFER TO ONPS--FEE PROGRAMS:									
FEE COLLECTION COSTS	--	--	--	--	(6,121,000)	(6,121,000)	(307)		
VISITOR TRANSPORTATION SYSTEMS	--	--	--	--	(4,002,000)	(4,002,000)	--		
SUBTOTAL	--	--	--	--	(10,123,000)	(10,123,000)	(307)		
UNDISTRIBUTED INCREASE FOR UNIFORM ALLOWANCE	--	--	--	--	450,000	450,000	--		
SUBTOTAL PARKS, OTHER FIELD OFFICES, ETC.	370,367,500	12,237	372,283,600	12,247	(4,658,000)	367,625,600	12,005	344,041	79,276,515

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
REGIONWIDE CONCESSIONS MANAGEMENT:							
ROCKY MOUNTAIN	343,400	5	588,400	4		588,400	4
NORTH ATLANTIC	148,600	4	129,400	4		129,400	4
NATIONAL CAPITAL	204,900	4	219,100	4		219,100	4
MID-ATLANTIC	63,300	2	90,000	2		90,000	2
SOUTHEAST	180,800	3	178,000	3		178,000	3
MIDWEST	90,400	2	88,300	2		88,300	2
SOUTHWEST	157,700	5	165,100	5		165,100	5
WESTERN	301,400	7	481,200	7		481,200	7
PACIFIC NORTHWEST	185,700	3	228,600	3		228,600	3
ALASKA	200,700	3	223,600	3		223,600	3
DENVER SERVICE CENTER	346,200	9	320,000	7		320,000	7
WASHINGTON OFFICE	1,275,000	19	836,300	19		836,300	19
SUBTOTAL	3,498,100	66 1/	3,548,000	63 1/		3,548,000	63 1/

1/ DOES NOT INCLUDE FTE'S FOR CONCESIONS MANAGEMENT ASSIGNED TO PARKS WHICH ARE SHOWN IN THE ABOVE PARK SUMMARY

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
REGIONWIDE CYCLIC MAINTENANCE:							
ROCKY MOUNTAIN	2,982,400		2,964,500			2,964,500	
NORTH ATLANTIC	1,523,400		716,500			716,500	
NATIONAL CAPITAL	3,388,900		1,995,400			1,995,400	
MID-ATLANTIC	672,500		672,500			672,500	
SOUTHEAST	4,089,000		3,564,400			3,564,400	
MIDWEST	1,326,800		1,094,700			1,094,700	
SOUTHWEST	1,789,000		1,680,000			1,680,000	
WESTERN	4,733,700		4,135,500			4,135,500	
PACIFIC NORTHWEST	1,443,300		1,343,800			1,343,800	
ALASKA	112,000		251,500			251,500	
SUBTOTAL	22,061,000		18,418,800			18,418,800	

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
REGIONWIDE CYCLIC MAINTENANCE FOR HISTORIC PROPERTIES:							
ROCKY MOUNTAIN	588,000		584,500			584,500	
NORTH ATLANTIC	640,000		636,200			636,200	
NATIONAL CAPITAL	301,400		347,900			347,900	
MID-ATLANTIC	1,109,600		1,109,600			1,109,600	
SOUTHEAST	829,000		839,500			839,500	
MIDWEST	1,144,500		688,000			688,000	
SOUTHWEST	1,156,000		1,149,500			1,149,500	
WESTERN	1,945,000		1,953,200			1,953,200	
PACIFIC NORTHWEST	171,500		170,500			170,500	
ALASKA	218,400		75,700			75,700	
SUBTOTAL	8,103,400		7,554,600			7,554,600	
REGIONWIDE REPAIR AND REHABILITATION PROGRAM:							
ROCKY MOUNTAIN	5,927,300		4,856,700		(917,300)	3,939,400	
NORTH ATLANTIC	2,389,100		2,217,200		(418,800)	1,798,400	
NATIONAL CAPITAL	1,523,900		4,068,800		(1,301,500)	2,767,300	
MID-ATLANTIC	1,510,100		1,724,000		(425,600)	1,298,400	
SOUTHEAST	3,260,000		3,494,900		(660,100)	2,834,800	
MIDWEST	2,554,300		1,886,600		(356,300)	1,530,300	
SOUTHWEST	1,913,000		1,636,500		(309,100)	1,327,400	
WESTERN	3,981,600		6,040,200		(2,291,100)	3,749,100	
PACIFIC NORTHWEST	2,491,200		2,056,400		(388,400)	1,668,000	
ALASKA	1,371,100		570,800		(107,800)	463,000	
SERVICEWIDE DAM SAFETY PROJECTS	490,000					--	
MAINTENANCE MANAGEMENT SYSTEM	--		1,978,000		(1,978,000)	--	
SUBTOTAL	27,411,600		30,530,100		(9,154,000)	21,376,100	

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
REGIONWIDE INCIENTAL PERSONNEL COSTS (LUMP SUM LEAVE, EMPLOYEE TRANSFERS, INCENTIVE AWARDS ETC):							
ROCKY MOUNTAIN	148,800		147,900			147,900	
NORTH ATLANTIC	128,200		127,400			127,400	
NATIONAL CAPITAL	336,600		334,600			334,600	
MID-ATLANTIC	291,900		291,900			291,900	
SOUTHEAST	231,000		229,600			229,600	
MIDWEST	314,100		554,100			554,100	
SOUTHWEST	201,000		234,000			234,000	
WESTERN	783,700		1,254,000			1,254,000	
PACIFIC NORTHWEST	150,000		146,100			146,100	
ALASKA	108,000		--		210,000	210,000	
DENVER SERVICE CENTER	4,000		--			--	
WASHINGTON OFFICE	79,000		--			--	
SUBTOTAL	2,776,300		3,319,600		210,000	3,529,600	
REGIONWIDE NATURAL SCIENCE PROGRAMS:							
ROCKY MOUNTAIN	584,000	4	676,500	5		676,500	5
NORTH ATLANTIC	498,400	5	503,800	5		503,800	5
NATIONAL CAPITAL	506,800	14	502,000	14		502,000	14
MID-ATLANTIC	236,300	1	236,900	1		236,900	1
SOUTHEAST	1,146,000	8	1,135,600	8		1,135,600	8
MIDWEST	485,600	3	468,100	3		468,100	3
SOUTHWEST	449,900	8	454,700	8		454,700	8
WESTERN	1,912,300	39	2,142,300	43		2,142,300	43
PACIFIC NORTHWEST	725,300	10	732,900	10		732,900	10
ALASKA	687,200	5	684,400	6		684,400	6
SUBTOTAL	7,231,800	97	7,537,200	103		7,537,200	103

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
REGIONWIDE PARK PROFESSIONAL SERVICES AND PARK SUPPORT OPERATIONS:							
ROCKY MOUNTAIN	1,868,600	60	1,802,000	58		1,802,000	58
NORTH ATLANTIC	1,119,700	35	1,154,500	33		1,154,500	33
NATIONAL CAPITAL	3,145,300	57	3,175,900	63		3,175,900	63
MID-ATLANTIC	1,171,700	24	1,214,300	23		1,214,300	23
SOUTHEAST	1,275,500	38	1,813,400	44		1,813,400	44
MIDWEST	1,665,000	33	1,933,200	47		1,933,200	47
SOUTHWEST	1,558,700	37	1,865,300	44		1,865,300	44
WESTERN	1,744,100	52	1,695,300	43		1,695,300	43
PACIFIC NORTHWEST	764,600	22	778,100	22		778,100	22
ALASKA	4,325,800	76	4,592,800	78	2,400,000	6,992,800	98
SUBTOTAL	18,639,000	434	20,024,800	455	2,400,000	22,424,800	475
REGIONWIDE PROPERTY REPLACEMENT PROGRAM:							
ROCKY MOUNTAIN	1,919,200		1,933,300			1,933,300	
NORTH ATLANTIC	547,600		544,300			544,300	
NATIONAL CAPITAL	1,211,700		1,204,400			1,204,400	
MID-ATLANTIC	777,100		777,100			777,100	
SOUTHEAST	1,137,000		1,130,200			1,130,200	
MIDWEST	474,500		593,200			593,200	
SOUTHWEST	539,000		535,800			535,800	
WESTERN	2,458,900		2,438,300			2,438,300	
PACIFIC NORTHWEST	517,600		515,700			515,700	
ALASKA	312,200		379,100			379,100	
SUBTOTAL	9,894,800		10,051,400			10,051,400	

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
DENVER SERVICE CENTER:							
SERVICEWIDE STATISTICAL ASSISTANCE PROGRAM.........................	262,900	6	269,000	6		269,000	6
TRAINING SUPPORT	29,000		29,000			29,000	
SUBTOTAL	291,900	6	298,000	6		298,000	6
HARPERS FERRY CENTER:							
AUDIOVISUAL ARTS	1,003,200	37	1,011,000	37		1,011,000	37
INFORMATIONAL PUBLICATIONS	2,859,100	23	2,890,000	23	(2,890,000)	--	
MUSEUM EXHIBIT MAINTENANCE	451,400	10	457,000	10		457,000	10
MUSEUM REFERENCE SERVICES	1,203,800	19	1,176,000	19		1,176,000	19
EXHIBIT REHABILITATION AND PRESERVATION PROGRAM	3,891,400	98	3,962,000	98	(3,962,000)	--	
TRAINING SUPPORT	21,000		21,000			21,000	
SUBTOTAL	9,429,900	187	9,517,000	187	(6,852,000)	2,665,000	66
MISC OFFICES, PROGRAMS, ETC.:							
ALBRIGHT TRAINING CENTER MAINTENANCE PROGRAM	66,000		65,600			65,600	
APPALACHIAN TRAIL PROJECT	649,000	7	638,600	7		638,600	7

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
BOISE INTERAGENCY FIRE CENTER	471,300	5	472,600	5		472,600	5
ENERGY, MINING & MINERALS ACTIVITIES	1,465,000	32	1,407,700	32		1,407,700	32
GEOGRAPHIC INFORMATION SYSTEM	542,900	10	541,200	11		541,200	11
INTERNATIONAL PARK AFFAIRS	532,000	10	791,400	10	(368,000)	423,400	10
MIDWEST ARCHEOLOGICAL CENTER	280,800	31	284,300	27		284,300	27
NATIONAL SYMPHONY PERFORMANCES.....	588,000		584,500			584,500	
NATIONAL CAPITAL REGION PERFORMING ARTS ASSISTANCE.......	867,300		862,100			862,100	
NORTH ATLANTIC HISTORIC PRESERVATION CENTER..............	249,400	40	275,900	53		275,900	53
PRESIDENT'S COMMISSION	--		--		314,000	314,000	
SOUTHEAST ARCHEOLOGICAL CENTER.....	446,900	18	467,800	18		467,800	18
SOUTHEAST CULTURAL PRESERVATION CENTER.........................	577,000	15	560,000	15		560,000	15
SOUTHWEST CULTURAL RESOURCES CENTER.........................	1,083,600	55	865,800	48		865,800	48
STUDENT CONSERVATION PROGRAM	407,000		497,000			497,000	
U.S.PARK POLICE-WASHINGTON METRO...	20,277,700	519	17,879,600	522		17,879,600	522
U.S. PARK POLICE PENSION FUND......	0		4,811,600		975,000	5,786,600	

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
WESTERN ARCHEOLOGICAL CENTER.......	957,800	30	889,300	31		889,300	31
SUBTOTAL	29,461,700	772	31,895,000	779	921,000	32,816,000	779
SERVICEWIDE PROGRAMS:							
ACID RAIN MONITORING	1,237,000		1,229,600			1,229,600	
AIR QUALITY	3,001,000		4,064,000			4,064,000	
CULTURAL RESOURCES PRESERVATION .	6,929,000		5,193,000		(5,193,000)	--	
DAM SAFETY PROGRAM	402,000	1	399,600	1		399,600	1
EMERGENCIES: STORM AND FLOOD DAMAGE, AND STRUCTURAL FIRE DAMAGE	2,851,000		3,414,900			3,414,900	
MAINTENANCE PROGRAM OVERVIEW	2,365,000		2,351,000			2,351,000	
NATURAL RESOURCES MANAGEMENT TRAINING PROGRAM	834,000	23	806,100	23		806,100	23
NATURAL RESOURCES PRESERVATION PROGRAM	7,013,000		6,970,900		(6,970,900)	--	
PARK SUPPORT OPERATIONS	4,595,000	102	4,575,400	98		4,575,400	98
SERVICEWIDE NATURAL RESOURCES PROGRAM SUPPORT	3,265,000	62	3,155,800	64		3,155,800	64
TRAINING	2,644,000	26	2,664,500	28		2,664,500	28

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
VOLUNTEER-IN-PARKS PROGRAM	490,000		487,100		(487,100)	--	
SUBTOTAL	35,626,000	214	35,311,900	214	(12,651,000)	22,660,900	214
PARK MANAGEMENT GRAND TOTAL	544,793,000	14,013	550,290,000	14,054	(29,784,000)	520,506,000	13,711
FOREST FIRE SUPPRESSION AND REHABILITATION OF BURNED AREAS ..	5,076,000		1,169,000		150,000	1,319,000	
PARK, RECREATION AND WILDERNESS PLANNING							
ROCKY MOUNTAIN	85,000	2	94,300	2		94,300	2
NORTH ATLANTIC	81,000	3	114,000	3		114,000	3
NATIONAL CAPITAL	135,000	--	104,700	--		104,700	--
MID-ATLANTIC	85,000	2	101,800	2		101,800	2
SOUTHEAST	30,000	--	24,100	--		24,100	--
MIDWEST	52,000	1	52,500	1		52,500	1
SOUTHWEST	80,000	2	102,000	2		102,000	2
WESTERN	65,000	1	75,000	1		75,000	1
PACIFIC NORTHWEST	31,000	1	29,000	1		29,000	1
ALASKA	80,000	1	80,000	1		80,000	1
DENVER SERVICE CENTER	1,361,000	48	1,197,700	48		1,197,700	48
WASHINGTON & SERVICEWIDE	2,183,000	13	2,265,900	13	1,000,000	3,265,900	13
PARK, RECREATION AND WILDERNESS PLANNING TOTAL	4,268,000	74	4,241,000	74	1,000,000	5,241,000	74

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
STATUTORY OR CONTRACTUAL AID FOR OTHER ACTIVITIES							
NORTH ATLANTIC	936,000	14	945,000	14		945,000	14
NATIONAL CAPITAL	2,156,000		1,143,000		(1,044,000)	99,000	
SOUTHEAST	198,000		367,000		(168,000)	199,000	
MIDWEST	576,000		1,020,000		(447,000)	573,000	
STATUTORY OR CONTRACTUAL AID FOR OTHER ACTIVITIES TOTAL	3,866,000	14	3,475,000	14	(1,659,000)	1,816,000	14
GENERAL ADMINISTRATION							
ROCKY MOUNTAIN	3,534,000	134	3,300,800	131		3,300,800	131
NORTH ATLANTIC	2,212,000	77	2,050,800	71		2,050,800	71
NATIONAL CAPITAL	3,953,000	122	3,648,000	101		3,648,000	101
MID-ATLANTIC	2,118,000	62	2,030,000	57		2,030,000	57
SOUTHEAST	2,431,000	81	2,303,200	73		2,303,200	73
MIDWEST	1,737,800	61	1,629,800	56		1,629,800	56
SOUTHWEST	2,135,600	75	1,984,600	66		1,984,600	66
WESTERN	2,507,100	89	2,375,100	84		2,375,100	84
PACIFIC NORTHWEST	2,046,000	67	1,881,600	61		1,881,600	61
ALASKA	256,000	4	239,500	4		239,500	4
WASHINGTON & SERVICEWIDE	20,806,100	291	19,443,600	271	1,610,000	21,053,600	271

ONPS, PARK MANAGEMENT PARK AREAS, REGIONAL AND SERVICEWIDE PROGRAMS AND OTHER ACTIVITIES	FINAL FY 1985	FY 1985 FTE/T	ESTIMATED AVAILABLE FY 1986	FY 1986 FTE/T	INCREASE/ DECREASE	BUDGET ESTIMATE FY 1987	FY 1987 FTE/T
GSA SPACE REIMBURSEMENT	12,628,400		11,697,000		1,169,000	12,866,000	
EMPLOYEE'S COMPENSATION FUND	3,950,000		4,345,000			4,345,000	
UNEMPLOYMENT COMPENSATION	8,500,000		7,892,000			7,892,000	
GENERAL ADMINISTRATION TOTAL	68,815,000	1,063	64,821,000	975	2,779,000	67,600,000	975
OPERATION OF THE NATIONAL PARK SYSTEM TOTAL 2/	626,818,000	15,164	623,996,000	15,117	(27,514,000)	596,482,000	14,774
OTHER ACCOUNTS		1,097		1,170			1,449
TOTAL	626,818,000	16,261	623,996,000	16,287	(27,514,000)	596,482,000	16,223

2/ TOTAL FULL-TIME EQUIVALENTS SHOWN FOR THE "OPERATION OF THE NATIONAL PARK SYSTEM" ACCOUNT ARE BY ORGANIZATION IRRESPECTIVE OF FUNDING SOURCE. FOR EXAMPLE, SOME TEMPORARY POSITIONS IN PARKS ARE FUNDED FROM CONSTRUCTION.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM

Program and Financing (in thousands of dollars)

Identification code 14-1036-0-1-303		1985 actual	1986 estimate	1987 estimate
Direct program:				
00.01	Park management......................	544,537	550,076	520,583
00.02	Forest fire suppression and rehabilitation of burned areas....	14,550	1,169	1,319
00.03	Park, recreation, and wilderness planning..........................	4,256	4,241	5,236
00.04	Statutory and contractual aid.......	3,866	3,475	1,815
00.05	General administration..............	68,802	64,821	67,529
00.91	Total direct program................	636,011	623,782	596,482
01.01	Reimbursable program................	2,617	3,500	3,800
10.00	Total obligations...................	638,629	627,282	600,282
Financing:				
14.00	Offsetting collections from: Non-Federal sources...............	-2,617	-3,500	-3,800
21.40	Unobligated balance available, start of year.....................	-180	--	--
25.00	Unobligated balance lapsing.........	487	214	--
39.00	Budget authority....................	636,318	623,996	596,482
Budget authority:				
40.00	Appropriation.......................	626,818	627,763	596,482
40.00	Reduction pursuant to P.L. 99-190...	--	-3,767	--
42.00	Transferred from other accounts.....	9,500	--	--
43.00	Appropriation (adjusted)............	636,318	623,996	596,482

Program and Financing (in thousands of dollars) (continued)

Identification code 14-1036-0-1-303		1985 actual	1986 estimate	1987 estimate
Relation of obligations to outlays:				
71.00	Obligations incurred, net...........	636,011	623,782	596,482
72.40	Obligated balance, start of year....	124,821	138,126	135,908
74.40	Obligated balance, end of year......	-138,126	-135,908	-130,390
77.00	Adjustments in expired accounts.....	-1,258	--	--
90.00	Outlays............................	621,448	626,000	602,000

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-1036-0-1-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority..........................	636,318	623,996	596,482
Outlays..................................	621,448	626,000	602,000
Reduction pursuant to P. L. 99-177:			
Budget authority..........................	--	-26,832	--
Outlays..................................	--	-21,612	-5,371
Supplemental under existing legislation:			
Budget authority..........................	--	13,470	--
Outlays..................................	--	10,776	2,694
Proposed for later transmittal under proposed legislation:			
Budget authority..........................	--	--	59,000
Outlays..................................	--	--	47,000
Total:			
Budget authority..........................	636,318	610,634	655,482
Outlays..................................	621,419	615,164	646,323

Object Classification (in thousands of dollars)

Identification code 14-1036-0-1-303	1985 actual	1986 estimate	1987 estimate
NATIONAL PARK SERVICE			
Direct obligations:			
Personnel compensation:			
11.1 Full-time permanent..................	259,447	262,723	260,394
11.3 Other than full-time permanent.......	65,943	65,680	61,498
11.5 Other personnel compensation.........	17,815	17,284	16,964
11.8 Special personnel services payments..	175	--	--
11.9 Total personnel compensation.........	343,380	345,687	338,856
12.1 Personnel benefits: Civilian........	53,522	42,520	43,038
13.0 Benefits for former personnel........	8,580	8,850	8,850
21.0 Travel and transportation of persons............................	11,883	11,880	12,042
22.0 Transportation of things.............	9,599	9,577	9,678
23.1 Standard level user charges..........	11,959	10,539	11,708
23.2 Rental payments to others............	1,053	1,157	1,157
23.3 Communications, utilities, and miscellaneous charges..............	24,900	24,842	27,457
24.0 Printing and reproduction............	3,494	3,486	1,807
25.0 Other services.......................	89,316	89,102	69,153
26.0 Supplies and materials...............	46,012	45,905	44,153
31.0 Equipment............................	21,789	21,739	22,112
32.0 Lands and structures.................	5,754	5,741	5,741
33.0 Investments and loans................	2	2	2

Object Classification (in thousands of dollars) (Continued)

Identification code 14-1036-0-1-303	1985 actual	1986 estimate	1987 estimate
41.0 Grants, subsidies, and contributions	2,836	2,530	503
42.0 Insurance claims and indemnities	219	219	219
43.0 Interest and dividends	1	1	1
44.0 Refunds	5	5	5
99.0 Subtotal, direct obligations	634,304	623,782	596,482
Reimbursable obligations:			
Personnel compensation:			
11.1 Full-time permanent	749	650	840
11.3 Other than full-time permanent	171	149	191
11.5 Other personnel compensation	35	31	40
11.9 Total personnel compensation	955	830	1,071
12.1 Personnel benefits: Civilian	89	102	132
21.1 Travel and transportation of persons	9	8	10
22.1 Transportation of things	11	9	12
23.3 Communications, utilities, and miscellaneous charges	201	173	223
24.0 Printing and reproduction	8	7	9
25.0 Other services	796	1,957	1,806
26.0 Supplies and materials	210	181	236
31.0 Equipment	271	233	301
32.0 Lands and structures	67	--	--
99.0 Subtotal, reimbursable obligations	2,617	3,500	3,800

Object Classification (in thousands of dollars) (continued)

Identification code 14-1036-0-1-303	1985 actual	1986 estimate	1987 estimate
ALLOCATION TO FEDERAL HIGHWAY ADMINISTRATION:			
11.1 Personnel compensation: Full-time permanent	29	--	--
12.1 Personnel benefits: Civilian	4	--	--
21.0 Travel and transportation of persons	2	--	--
22.0 Transportation of things	2	--	--
24.0 Printing and reproduction	2	--	--
25.0 Other services	146	--	--
99.0 Supplies and materials	4	--	--
32.0 Lands and structures	1,519	--	--
99.0 Subtotal obligations, Federal Highway Administration	1,708	--	--
99.9 Total obligations	638,629	627,282	600,282

Personnel Summary

Identification code 14-1036-0-1-303	1985 actual	1986 estimate	1987 estimate
Direct program:			
Total number of full-time permanent positions	10,808	10,751	10,663
Total compensable workyears:			
Full-time equivalent employment	14,683	14,649	14,306
Full-time equivalent of overtime and holiday hours	409	409	409
Average GS grade	7.57	8.01	8.01
Average GS salary	23,386	23,598	23,598
Average salary of ungraded positions	24,312	23,096	23,096
Average ES salary	68,359	68,359	68,359
Reimbursable program:			
Total number of full-time permanent positions	13	13	13
Total compensable workyears:			
Full-time equivalent employment	36	31	40
Average GS grade	7.57	8.01	8.01
Average GS salary	26,528	26,789	26,789
Average salary of ungraded positions	24,312	23,096	23,096
ALLOCATION TO FEDERAL HIGHWAY ADMINISTRATION:			
Total number of full-time permanent positions	1	--	--

Personnel Summary (Continued)

Identification code 14-1036-0-1-303	1985 actual	1986 estimate	1987 estimate
Total compensable workyears:			
Full-time equivalent employment..........	1	--	--
Full-time equivalent of overtime and holiday hours..........................	--	--	--
Average GS grade............................	8.92	--	--
Average GS salary...........................	25,500	--	--

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM
(Supplemental now requested, existing legislation)

Program and Financing (in thousands of dollars)

Identification code 14-1036-1-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
Direct program:			
00.01 Park management	--	3,970	--
00.02 Forest fire suppression and rehabilitation of burned areas	--	9,500	--
10.00 Obligations	--	13,470	--
Financing:			
40.00 Budget authority (appropriation)	--	13,470	--
Relations of obligations to outlays:			
71.00 Obligations incurred, net	--	13,470	--
72.40 Obligated balance, start of year	--	—	2,694
74.40 Obligated balance, end of year	--	-2,694	--
90.00 Outlays	--	10,776	2,694

A supplemental appropriation is requested to cover costs incurred in fiscal 1985 for Forest Fire Suppression and Presuppression ($9,500,000), to enforce laws and regulations governing mining activities in Alaska parks ($3,200,000), and cover increased payments to the pension fund for the U.S. Park Police ($770,000).

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM
(Supplemental now requested, existing legislation)

Object Classification (in thousands of dollars)

Identification code 14-1036-1-1-303	1985 actual	1986 estimate	1987 estimate
Personnel compensation:			
11.1 Full-time permanent..................	--	209	--
11.3 Positions other than permanent.......	--	1,594	--
11.5 Other personnel compensation.........	--	2,049	--
11.9 Total personel compensation..........	--	3,852	--
12.1 Personnel benefits: Civilian........	--	145	--
13.0 Benefits for former personnel........	--	770	--
21.0 Travel and transportation of persons............................	--	728	--
22.0 Transportation of things.............	--	120	--
23.1 Standard level user charges..........	--	152	--
25.0 Other services.......................	--	5,777	--
26.0 Supplies and materials...............	--	987	--
31.0 Equipment............................	--	939	--
99.9 Total obligations....................	--	13,470	--

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM
(Supplemental now requested, existing legislation)

Personnel Summary

Identification code 14-1036-1-1-303	1985 actual	1986 estimate	1987 estimate
Total number of full-time permanent positions..............................	--	8	--
Total compensable workyears:			
Full-time equivalent employment..........	--	16	--
Average GS grade..........................	--	9.90	--
Average GS salary.........................	--	27,500	--

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF NATIONAL PARK SYSTEM

Program and Financing (in thousands of dollars)

Identification code 14-1036-6-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	--	-26,983	--
Financing:			
25.00 Reduction in new spending authority (offsetting collections)..........	--	151	--
40.00 Budget authority (appropriation)....	--	-26,832	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-26,983	--
72.40 Obligated balance, start of year....	--	--	-5,371
74.40 Obligated balance, end of year......	--	5,371	--
90.00 Outlays............................	--	-21,612	-5,371

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM

Program and Financing (in thousands of dollars)

Identification code 14-1036-6-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Obligations..........................	--	13,470	--
10.00 Total obligations...................	--	-26,983	--
Financing:			
25.00 Reduction new spending authority (offsetting collections)			
40.00 Budget authority (appropriation......	--	13,470	--
Relations of obligations to outlays:			
71.00 Obligations incurred,net............	--	13,470	--
72.40 Obligated balance, start of year....	--	-2,694	2,694
74.40 Obligated balance, end of year......	--	--	--
90.00 Outlays.............................	--	10,776	2,694
72.40 Obligated balance, start of year....	124,821	138,126	135,908
74.40 Obligated balance, end of year......	-138,126	-135,908	-130,390
77.00 Adjustments in expired accounts.....	-1,258	--	--
90.00 Outlays.............................	621,448	626,000	602,000

Justification of Program and Performance

Activity: Operation of the National Park System--Fee Programs

Program Elements		FY 1986 Enacted To Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc (+) Dec (-) from Base
Operation of the National Park System--Fee Programs	$	--	--	--	59,000	+59,000
	(FTE/T)	(--)	(--)	(--)	(528)	(+528)

Authorization

16 U.S.C. 460l-4-11	The Land and Water Conservation Fund Act, as amended.

Objectives

To utilize revenues from recreation fees to operate, maintain, and preserve the units of the National Park System.

Base Program

The concept and practice of charging an entrance fee to park visitors predates the establishment of the National Park System. Park visitor fees levied by the Government originated at Mount Rainier, the first park to admit automobiles, in 1908. This practice spread to other areas over the next several years so that by the 1916 season, seasonal auto permits ranged from $2 at Glacier and Mesa Verde National Parks, to $10 dollars at Yellowstone. These early automobile permits were justified as offsetting the cost of road construction and maintenance.

Although the number of parks charging fees and the specific rates have changed, entrance and user fees have remained a constant feature of park operations since the early years of this century. Moreover, the principle of charging for recreation use has been repeatedly endorsed by both the Congress and the public during the period since the first National Parks were created. Simply stated, where the use of Federal resources conveys special benefits to identifiable recipients, above and beyond those which accrue to the general public, such recipients should pay a reasonable charge for the service received.

Entrance fees for units of the National Park System have not been raised or initiated since 1972. Indeed, many entrance fees have remained constant for a much longer period of time, and in a few areas entrance fees have actually decreased. A family visiting Yellowstone National Park in the 1930's would have paid $3 for a vehicle permit. Fifty years later, in 1986, the entrance fee at Yellowstone is $2 per vehicle.

The Administration is proposing legislation that will shift some of the burden of providing and maintaining recreation areas from the general taxpayer to those individuals who use and benefit from this service. Specifically, this legislation would lift the current freeze on entrance fees enacted under Section 402 of P.L. 96-87, authorize the Secretary of the Interior to increase existing and establish new entrance fees, and permit the use of the fee revenues to operate, maintain and preserve the 337 units of the National Park System. Presently, recreation fees collected by the National Park Service are deposited into the Land and Water Conservation Fund and are available for subsequent appropriation to finance Federal land acquisition and matching grants to States. Since the current balance available for appropriation from the Land and Water Conservation Fund exceeds $3.5 billion, recreation fee revenues are not needed to continue the acquisition of Federal parkland.

The program designed to support this legislation contains the following elements:

-- Entrance fees would increase at the current 60 fee areas. Entrance fees would be established at an additional 120 areas.

-- Entrance fee amounts would be either $10, $5, or $3 dollars per vehicle--or $5, $2.50, and $1.50 per person--depending on the classification of the park as a prime, intermediate, or standard fee area. This classification is based on an application of the 6 criteria included in the Land and Water Conservation Fund act to each park and considers such factors as the direct and indirect cost to the government, visitor benefits, comparable fees charged by other public and private organizations for similar services, economic and administrative feasibility, public policy or interest served, and other pertinent factors. There is no overall criteria for the present fee structure of entrance fees which generally range from $1 to $3 per vehicle.

-- The price of the Golden Eagle Annual Passport would increase from $10 to $40 and would permit unlimited entry to all fee areas during a one year period.

-- Annual passes would also be developed for individual parks at rates that would vary from site to site.

-- A one-time charge of $10 dollars would be established for the Golden Age Passport, which is currently available free of charge. The Golden Age Passport will continue to allow lifetime unlimited entry to fee areas for individuals 62 years of age and older.

-- Children under 16 years of age and education groups would continue to be admitted free of charge to all fee sites.

-- Generally, fees would not be established for areas close to major urban centers that were established principally to provide recreational opportunities for urban populations and where multiple access points would make fee collection infeasible.

-- Of the total revenue collected, 20% would be returned to the U.S.

-- Of the total revenue collected, 20% would be returned to the U.S. Treasury General Fund, the remaining 80% would be available to the National Park Service to provide and improve services and facilties for the visiting public.

As shown in the table below, the estimated gross revenue from this proposed fee legislation is $73.75 million.

Estimated Revenue--Proposed Legislation
($000's)

	Estimated FY 1986	Proposed Legislation
Entrance Fees.............................	$8,100	$53,650
Golden Eagle Passport and Annual Park Pass	1,200	5,500
Golden Age Passport.......................	--	1,900
User Fees (Campgrounds, tours, etc.).....	12,000	12,700
Total Revenues........................	21,300	73,750

Of this total, 80 percent, or $59 million would be available to the National Park Service, beginning in fiscal 1987, to carry out a variety of programs and projects as shown in the following table:

	Base Program Level		Enhanced Program Level		Total Program Level	
	Amount	FTE/T	Amount	FTE/T	Amount	FTE/T
Fee Collection Activities	6,121	307	5,000	100	11,121	407
Informational Publications	2,890	23	510	--	3,400	23
Visitor Transportation Systems	4,002	--	--	--	4,002	--
Harpers Ferry Center--Exhibit Rehabilitation Program	3,962	98	--	--	3,962	98
Cultural Resources Preservation Program	5,193	--	--	--	5,193	--
Natural Resources Preservation Program	6,971	--	--	--	6,971	--
Volunteers-in-Parks Program	487	--	503	--	990	--
Maintenance--Repair and Rehabilitation Projects	9,154	--	--	--	9,154	--
Enhance Park Operations	--	--	14,207	--	14,207	--
Total	38,780	428	20,220	100	59,000	528

The amounts listed in the column headed "Base Program Level" are activities financed in prior years from appropriated funds, but which are considered appropriate for funding from fee revenues for several reasons. Emphasis is given to funding projects rather that personnel because the proposed legislation calls for the use of fee revenues the same year they are generated. The Service also believes that fee revenues should support a broad range of park programs that benefit all units of the National Park System.

Finally, the activities involve projects or services which provide a direct benefit to park visitors or contribute to the preservation of the resources the park was established to protect.

The enhanced level proposed for the Volunteers-in-Parks Program will increase funding to the authorized amount of $1 million and allow the Service to adequately reimburse volunteers for incidental expenses. Additional funds proposed for the Informational Publications programs will accelerate the conversion of all park folders to the larger and more informative unigrid format, offset increases in printing costs which have averaged 5 percent a year since 1981, and permit the publication of an additional 6 - 7 million folders to help alleviate chronic shortfalls in heavily visited areas.

The remaining funds $25.3 million will be used to cover the cost of fee collection and to enhance operations and visitor services in all areas of the National Park System. Particular emphasis will be given to innovative ways to improve interpretive programs without increasing staff. The Service will develop a method for allocating these funds that recognizes high priority needs that contribute toward the accomplishment of the Director's 12 Point Plan.

The net effect of this proposal is that the revenues paid by park visitors and recreation users will be made available to maintain and improve services and facilities at no additional cost to the general taxpayer.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM - FEE PROGRAMS
(Proposed for later transmittal, proposed legislation)

Program and Financing (in thousands of dollars)

Identification code 14-1036-2-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	--	--	59,000
Financing:			
40.00 Budget authority (appropriation) (indefinite, special fund)........	--	--	59,000
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	--	59,000
74.00 Obligated balance, end of year......	--	--	-12,000
90.00 Outlays............................	--	--	47,000

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM -- FEE PROGRAMS
(Proposed for later transmittal, proposed legislation)

Object Classification (in thousands of dollars)

Identification code 14-1036-2-2-303	1985 estimate	1986 estimate	1987 estimate
Personnel compensation:			
11.1 Full-time permanent	--	--	3,273
11.3 Other than full-time permanent	--	--	5,806
11.5 Other personnel compensation	--	--	478
11.9 Total personnel compensation	--	--	9,557
12.1 Personnel benefits: Civilian	--	--	834
23.3 Communications, utilities and miscellaneous charges	--	--	900
25.0 Other services	--	--	45,209
26.0 Supplies and materials	--	--	1,700
31.0 Equipment	--	--	800
99.0 Total obligations	--	--	59,000

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION OF THE NATIONAL PARK SYSTEM - FEE PROGRAMS
(Proposal for later transmittal under proposed legislation)

Personnel Summary

Identification code 14-1036-2-2-303	1985 actual	1986 estimate	1987 estimate
Total number of full-time permanent positions..............................	--	--	146
Total compensable workyears:			
Full-time equivalent employment..........	--	--	528
Average GS grade...........................	--	--	6.50
Average GS grade...........................	--	--	18,100

Appropriation Summary Statement

Appropriation: National Recreation and Preservation

The National Recreation and Preservation Programs cover a broad range of activities relating to outdoor recreation planning, preservation of natural, cultural and historic resources, and environmental compliance and review. These programs provide a focal point at the Federal level for recreation and preservation planning, the coordination of Federal and State policies, procedures and guidelines, and the provision of technical assistance to Federal, State, and local governments and private organizations.

The major funding activities include:

1. Recreation Programs: The activity includes technical assistance to State and local governments, recreation data collection and analysis, the transfer of surplus Federal real property to local governments for recreation uses, and monitoring Federal recreation fee programs.

2. Natural Programs: This activity covers technical assistance to States in developing river conservation programs and application for nominations to the National Wild and Scenic Rivers system, Congressionally mandated studies of rivers and trail routes for possible inclusion in the National Scenic and Historic Trails or Wild and Scenic River Systems, and management of the National Natural Landmark Program.

3. National Register Programs: This activity includes management of the National Register of Historic Places, review and certification of application for Federal Tax Credits for Historic Preservation, cultural resources management planning, the National Historic Landmarks Program, the Historic American Buildings Survey and Historic American Engineering Record, and Governmentwide coordination of Federal archeology programs.

4. Environmental Compliance and Review: This activity includes the staff resources to review and comment on Environmental Impact Statements, Federal licensing and permitting applications and other actions which may impact areas of National Park Service jurisdiction.

5. Grants Administration: This activity covers administrative expenses associated with the closeout of prior year grants from the Historic Preservation Fund and the Urban Parks and Recreation Fund.

NATIONAL RECREATION AND PRESERVATION

For expenses necessary to carry out recreation programs, natural programs, cultural programs, environmental compliance and review, and grant administration, not otherwise provided for, [$11,096,000] $9,547,000. (16 U.S.C. 1a-5, 460l-01-3, 461, 467, 469c, 470, 2501; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

National Recreation and Preservation

Appropriation: National Recreation and Preservation

Appropriation language and citations:

1. For expenses necessary to carry out recreation programs,

16 U.S.C. 460 l - 460l-3

16 U.S.C. 460 l-460 l-3 authorizes the Secretary of the Interior to carry out certain activities which have the common purpose of helping provide outdoor recreation resources for the Nation. These activities are (1) inventory and evaluation of needs and resources, (2) classification of resources, (3) formulation, maintenance, and revision of a comprehensive nationwide plan, (4) technical assistance to non-Federal entities, (5) encouragement of interstate and regional cooperation, (6) research and education, and (7) Federal interdepartmental cooperation and coordination.

16 U.S.C. 460l-6a

16 U.S.C. 460l-6a requires reports to Congress on Federal admission and recreation use fees and authorizes fee program administration.

40 U.S.C. 484(k)(2) and (3)

40 U.S.C. 484(k) (2) and (3) authorizes disposal of Federal surplus real property for use as public park or recreation areas, and requires determination and enforcement of compliance with terms of disposal.

2. natural programs,

16 U.S.C. 1a-5

16 U.S.C. 1a-5 directs the Secretary of the Interior to provide certain information to Congress regarding Registry of Natural Landmarks.

16 U.S.C. 1244 (b)-(c)

16 U.S.C. 1244(b)-(c) requires National Trails studies.

16 U.S.C. 1275-1276

16 U.S.C. 1275-1276 requires Wild and Scenic Rivers studies.

3. cultural programs,

16 U.S.C. 461-467

16 U.S.C. 461-467 authorizes the Secretary of the Interior to carry out certain activities to preserve historic sites, buildings, and objects of national significance for public use, and expressly authorizes appropriation of funds for this purpose.

16 U.S.C. 469-469c

16 U.S.C. 469-469c establishes a program for preservation of historical and archeological data which might otherwise be lost or destroyed as the result of a Federal or federally assisted or licensed project, activity, or program, and authorizes appropriation of specific amounts for this purpose.

4. environmental compliance and review,

42 U.S.C. 4332

42 U.S.C. 4332 requires writing and reviewing outdoor recreation aspects of environmental impact statements.

49 U.S.C. 1653(f)

49 U.S.C. 1653(f) requires review of proposed Department of Transportation projects which could have an adverse impact upon public park and recreation facilities.

5. and grant administration, not otherwise provided for

16 U.S.C. 1, 1b, 1c, 3

16 U.S.C. 1, 1b, 1c, 3 specifies administration functions of the National Park Service in regard to the Operation of the National Park System.

Summary of Requirements

APPROPRIATION: National Recreation & Preservation

SUMMARY OF BASE ADJUSTMENTS

(Dollar amounts in thousands)

	FTE-T	Amount
1986 Appropriation	283	11,029
P.L. 99-177	—	- 474
1986 Adjusted Appropriation	283	10,555
Adjustment for 1986 impact of P.L. 99-177	—	+ 474
1987 Base Budget	283	11,029
Program Changes(changes to Base Budget)	- 51	- 1,482
Total Requirements(1987 Estimates)	232	9,547

Comparison by activity/subactivity	1985 Actual		1986 Appropriation Enacted to Date		P.L. 99-177 Reduction	FY 1986 Adjusted Approp.	Fiscal 1987 Base		Fiscal 1987 Estimate		Inc. or Dec.() from 1986 Appropriation		Inc. or Dec.() from 1986 Adjusted Approp.	Inc. or Dec.() Over 1987 Base	
	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Amount	FTE-T	Amount
Recreation Programs	11	625	11	627	-27	600	11	627	5	284	-6	-343	-316	-6	-11
Natural Programs	53	1,712	53	1,653	-71	1,582	53	1,653	9	541	-44	-1,112	-1,041	-44	-1,112
National Register Programs	176	6,667	174	6,843	-294	6,549	174	6,843	174	6,843	—	—	294		—
Environmental Compliance and Review	8	392	8	400	-17	383	8	400	8	400	—	—	17	—	—
Grant Administration	39	1,715	35	1,506	-65	1,441	35	1,506	34	1,479	-1	-27	38	-1	-35
Special Summer Programs	2	—	2	—	—	—	2	—	2	—	—	—	—	—	—
Total, National Recreation and Preservation	287	11,111	283	11,029	-474	10,555	283	11,029	232	9,547	-51	1,482	-1,008	-51	1,482

NATIONAL PARK SERVICE

Justification of Adjustments to Base

(dollar amounts in thousands)

	FTE-T	Amount
Appropriation: National Recreation and Preservation		
Adjustment for FY 1986 P.L. 99-177 B.A Cancellations............	—	+474

The Balanced Budget and Deficit Control of Act of 1986 (P.L. 99-177) requires a 4.3 percent reduction in non-exempt programs. Since this reduction occurs only in fiscal 1986, this adjustment is made to allow a more comparable basis for showing program charges from fiscal 1986 to fiscal 1987.

Justification of Program and Performance

Activity: National Recreation and Preservation Programs
Subactivity: Recreation Programs

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Recreation Programs	($) (FTE-T)	627 (11)	600 (11)	627 (11)	284 (5)	-343 (-6)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Recreation Programs	627	-27	600

As a result of the $27,000 P.L. 99-177 reduction, the number of annual Surplus Property Program compliance inspections will be reduced from 200 to approximately 185.

Authorization

P.L. 88-29	Outdoor Recreation Organic Act
P.L. 91-485, P.L. 92-347, P.L. 95-625	Amendments to the Land and Water Conservation Fund Act

Objectives

Recreation Statistics and Information:

To provide public and private agencies with recreation statistics and resource information.

Surplus Federal Real Property:

To review excess property notices and utilization surveys to determine the potential recreation value, if and when the property becomes surplus.

To transfer to State and local governments surplus Federal real property and to ensure that property so transferred is used for park and recreation purposes as intended.

Federal Recreation Fee Program:

To report to Congress on the results of the recreation fee programs at Federal recreation areas.

National Recreation and Preservation Programs/Recreation Programs

Base Program

Recreation Statistics and Information.................	$240,000	4 FTE

NPS coordinates recreation statistics collection efforts with other Federal agencies providing recreation opportunities. These efforts will include: gathering and analyzing information on trends, accomplishments, and developments in public and private recreation over the past 20 years. Conducting data analysis for the Public Area Recreation Visitors Survey (PARVS) which will be completed during fiscal 1986 with the Forest Service, Fish and Wildlife Service, Corps of Engineers, Bureau of Land Management, Bureau of Reclamation, Tennessee Valley Authority, and the National Association of State Park Directors. Evaluation of the 1982-1983 Nationwide Recreation Survey will be completed in early fiscal 1987. Based on these evaluations decisions regarding the nature and form of the next Nationwide Survey effort (originally planned for fiscal 1987, but now planned for fiscal 1988) will be made and efforts will proceed to the design of the survey instrument and negotiation of survey arrangements and recruitment of cooperators. Disseminating information collected through previous surveys and other data collection efforts. Preliminary information on the 1982-1983 Nationwide Recreation Survey has been provided in response to over 600 requests. The Report on this survey is now in final stages of preparation for printing and should be available in April 1986.

NPS responds to requests for practitioner-oriented recreation information. Efforts during FY 1985 were directed toward improving our ability to retrieve information from our store of statistics and other materials. These efforts included development of a Thesaurus for Recreation to serve as the basis for internal indexing and retrieval efforts. During fiscal 1986 we intend to continue indexing of materials so that we can better serve the public in retrieving relevant information while improving the productivity of our services. About 2,000 requests for information were responded to during FY 1985.

Surplus Federal Real Property.........................	$377,000	7 FTE

NPS identifies and recommends for transfer to State and local governments surplus properties with exceptional merit for park and recreation use, determines whether the potential recipient has the resources to carry out development and future operations and maintenance of the property, and assists the potential recipient in applying for the property. When property is transferred, NPS monitors its use to assure compliance with the deed of conveyance.

Approximately 18 new conveyances are expected in 1987. Of the over 1,000 properties conveyed since the inception of the program, NPS routinely inspects some 200 properties annually and takes remedial action in connection with some 25 to 50 properties with problems or potential problems in compliance with intended use. In addition, NPS responds to approximately 300 requests for changes in past transfers each year, such as amending deeds of conveyance or plans of use, or transferring property from one public agency to another.

National Recreation and Preservation Programs/Recreation Programs

Federal Recreation Fee Program........................ $10,000 -- FTE

NPS coordinates the collection and reporting of public outdoor recreation fee and visitation data from the seven Federal land-managing agencies, the States, and the private sector and prepares the annual Federal Recreation Fee Report to the Congress.

The Federal Recreation Fee Report was delevered to Congress on time and is used as the baseline for Federal and State recreation fee statistics.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	627	284	-343
(FTE-T)	(11)	(5)	(-6)

The Service is proposing to limit external Federal recreation programs to a minimum level. At the proposed level of funding for fiscal 1987, coordination of survey activities in support of Recreation Statistics and Information activities will be continued. No new surveys or information collection efforts will be initiated. In the Surplus Property program, efforts in the Washington Office will focus on meeting reporting requirements to Congress and maintaining internal controls to avoid fraud, waste, and abuse in the transfer of surplus property. New property transfers, compliance and other surplus property activities in the Regional Offices will be limited to those that can be accomplished in connection with other duties. The required Federal Fee Report to Congress will be prepared.

Distribution of decrease by object class

	FTE-T	Amount
Personnel compensation	-6	-$144,000
Personnel benefits		-17,000
Travel and transportation of persons		-34,000
Transportation of things		-3,000
Printing and reproduction		-32,000
Other services		-70,000
Supplies and materials		-23,000
Equipment		-20,000
Total		-343,000

Justification of Program and Performance

Activity: National Recreation and Preservation Programs
Subactivity: Natural Programs

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) From Base
Rivers and Trails	($)	1,496	1,432	1,496	384	-1,112
	(FTE-T)	(47)	(47)	(47)	(3)	(-44)
Natural Landmarks	($)	157	150	157	157	--
	(FTE-T)	(6)	(6)	(6)	(6)	(--)
Total Requirements	($)	1,653	1,582	1,653	541	-1,112
	(FTE-T)	(53)	(53)	(53)	(9)	(-44)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Rivers and Trails	1,496	-64	1,432
Natural Landmarks	157	-7	150
	1,653	-71	1,582

As a result of the $71,000 P.L. 99-177 reduction, the Service will reduce the number of new river conservation assistance projects to be initiated in 1986 ($48,000); defer printing of the California Pony Express Trail study and reduce the rate of completing trail studies ($16,000); and review approximately ten less landmarks for the annual Congressional Report on National Natural Landmarks.

Rivers and Trails Program

Authorization

Public Law 90-542	The Wild and Scenic Rivers Act as amended was enacted on October 2, 1968, to establish a national system of outstanding rivers which would be preserved in their free-flowing condition to complement the established policy of building dams and other water resource development. In section 5(a) of the act, Congress authorizes studies of specific rivers to determine whether they should be added to the national system.

National Recreation and Preservation Programs/Natural Programs

Public Law 90-543

The National Trails System Act, as amended was enacted on October 2, 1968, to establish a national system of trails in order to promote public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas of the Nation. In section 5(b)(c) of the act, Congress authorizes studies of specific trails to determine whether they should be added to the national system.

Objectives

-- To complete mandated trail studies and to provide oversight and coordination of the process to transmit completed trail study reports to the Department, OMB, and the Congress.

-- To assure adequate review of potential projects adversely affecting potential wild and scenic rivers listed in section 5(a) of the Wild and Scenic Rivers Act pursuant to section 7(b) of the Act.

-- To ensure that States, local governments, volunteers, and the private sector take an active role in river conservation and trail protection, thus minimizing the demands for direct Federal actions and the resultant expense.

-- To consult and provide information on river and trail-related issues to Federal, State, local, private, and non-profit interest groups to further the role of volunteerism, identify cost-cutting management strategies, and explore the self-sufficiency measures at all levels.

-- To initiate a Nationwide effort to inventory trails in cooperation with the private sector.

-- To assist, review, approve, and coordinate all National Recreation Trail applications.

Base Program

River and Trail Studies .... $384,000 5 FTE

In order for a river to be eligible for the national system, it must be in a free-flowing condition and possess one or more of the following values to an outstandingly remarkable degree: scenery, recreation, geology, fish and wildlife, or history. Beyond the question of eligibility, the Secretary of Agriculture or of the Interior, as the case may be, must determine whether a river is suitable for the national system. Suitability is based upon such factors as the extent of public lands in the immediate environment of the river; funds required for acquisition, development, and management; and local or State interest in acting to protect and manage the river and the feasibility and timeliness of such action.

In a trail study, a determination is made whether it is feasible and desirable to include the trail in the national system. A determination of desirability is based on the national significance of the route and the recreational and/or historic resources along the route. A determination of feasibility is based on the practicability of establishing such a trail in consideration of existing trail opportunities, costs that would be entailed, impact on other values of the resource base, and similar factors.

Of 91 wild and scenic river studies authorized by section 5(a) of Public Law 90-542, as amended, 55 have been the responsibility of the Department of the Interior, 33 have been the responsibility of the Department of Agriculture and three have been the joint responsibility of Agriculture and Interior. Of those 58 in which Interior has full or joint responsibility, 57 have been completed.

River Study Findings and Recommendations:

-- Sixteen resulted in congressional designation of all or a part of the river study segment determined qualified by the study agency.
-- Three resulted in State designation and subsequent addition to the National Park System under section 2(a)(ii): Little Miami and Little Beaver, Ohio, and Loxahatchee, Florida.
-- One resulted in joint Federal/State designation: Lower St. Croix, Minnesota and Wisconsin.
-- Eight rivers have been found not to qualify: Allegheny, Pennsylvania; Clarion, Pennsylvania; Maumee, Indiana and Ohio; Soldier Creek and Cahaba, Alabama; Nolichucky, North Carolina and Tennessee; and Koyuk and Melozitna, Alaska.
-- Fifteen rivers have been found to qualify, but were not recommended for designation.
-- Twenty-one reports recommended State and/or local actions to preserve the river, but have not resulted in inclusion in the national system.
-- Fifteen reports recommended congressional designation, but Congress has not taken action yet.
-- Two reports (Green, Colorado, and Yampa, Colorado) recommended no action pending outcome of several issues.

Completion of the Wild and Scenic River study for Wildcat Brook, New Hampshire, is scheduled for 1987.

Of 31 trail studies authorized by section 5(b)(c) of Public Law 90-543, as amended, 27 have been the responsibility of the Department of the Interior, three have been the responsibility of the Department of Agriculture and one the joint responsibility of Agriculture and Interior. Of these 31, all have been completed and will be transmitted to Congress.

Trail Study Findings and Recommendations:

-- Fourteen trails were found not qualified for addition to the system.
-- Thirteen trails were added to the national system; three administered by the Department of Agriculture and ten to the Department of Interior.

Six trail studies were initiated in fiscal 1984 and are scheduled for completion in fiscal 1986. Two studies were initiated in fiscal 1985 and are scheduled for completion in fiscal 1986.

National Recreation and Preservation Programs/Natural Programs

Comprehensive management and use plans for the designated Potomac Heritage and Natchez Trace National Scenic Trails, which were authorized by Public Law 98-11 on March 28, 1983, were initiated during fiscal 1984 with completion of the Natchez Trace plan in fiscal 1985 and the Potomac Heritage plan scheduled for completion during fiscal 1987.

Implementation Planning for Completed Trails Studies

Subsequent to designation of study trails by the Congress as components of the National Trails System, a comprehensive plan for the management and use of each trail is required. Section 5(f) of the National Trails System Act P.L. 90-543 (16 U.S.C. 1241 et. seq.), as amended, describes the content of three plans to include: objectives and practices in management; identification of natural, historical, and cultural resources to be preserved; details of cooperative agreements with State and local government and private interests; implementation of trail marking; proposed protection for historic and other resource sites of high potential, specific site and general development plans, and; the carrying capacity of the trail and a plan for implementation of the comprehensive management plan.

State and Local Rivers and Trails Conservation Assistance.. $1,112,000 44 FTE

The National Park Service delivers technical help to State and local governments in river conservation and reviews applications by States for the addition of State rivers to the national wild and scenic rivers system. Technical help is delivered through consultations, training programs, demonstration projects, and program development. Key items addressed are development of Statewide river and trail conservation systems, local conservation options, and increasing private involvement in river conservation and trails maintenance. The Service also manages the National Recreation Trails Program and responds to requests for rivers and trails information. During 1986, the Service is providing technical assistance to 22 States, and is working with the private sector to develop a nationwide trails inventory.

Natural Landmarks Program

Authorization

Public Law 74-292	The Historic Sites Act of 1935
Public Law 94-458	The General Authorities Act of 1970, as amended
Public Law 94-429	The Mining in the National Parks Act of 1976

Objectives

To identify and recognize by landmark designation those areas of nationally significant ecological and geological character which best represent the natural heritage of the Nation, and to encourage the preservation of those sites.

National Recreation and Preservation Programs/Natural Programs

Base Program

The ecological and geological features of each of the 33 physiographic provinces of the Nation are being studied to identify those areas that should be considered for national natural landmark status. By the end of fiscal 1985, 30 of the 33 natural regions were inventoried through natural region theme studies, and half of the studies of the remaining three natural regions will have been completed. This brings the National Park Service close to completing the first comprehensive, nationwide inventory of significant natural areas.

Those completed studies have yielded over 3,000 sites identified as having potential for natural landmark status. To evaluate those sites, the Service has prepared evaluation standards to be used by States, Federal agencies, and the public to determine if sites qualify for landmark consideration. Those standards will be issued as the Secretary of the Interior's Standards for the Evaluation of Potential National Natural Landmarks.

To facilitate decisions about which of the sites need evaluation, the Service is reviewing site data in the National Registry of Natural Landmarks. This will make possible an analysis of the major gaps in ecological feature representation in the Registry and help define goals for future landmark designation.

The criteria for national significance is being clarified in the Secretary of the Interior's Significance Criteria for National Natural Landmarks in fiscal 1985.

Because this program is responsible for nationwide classification of natural resource types, it began, in fiscal 1985, to assist and participate with other National Park Service units in implementing an improved systemwide process of natural resources planning to enable more efficient direction of resource management and protection.

The National Park Service also prepares the annual "Section 8" report to the Congress describing the status and condition of the national natural landmarks. The condition of 559 designated natural landmarks is monitored by the Service's Regional Offices working with the State natural area inventory programs. An important part of this monitoring is performed by a corps of volunteers, many of whom are qualified natural scientists interested in the preservation of important natural features. The National Park Service is recruiting additional volunteers as "Natural Landmark Patrons" to increase the number of sites reviewed annually while reducing the Service's costs for this activity.

The fiscal 1984 Section 8 Report cited 21 natural landmarks as being threatened or damaged. Landmark owners whose properties are listed among the threatened and damaged sites are assisted in finding sources to help alleviate the damaging or threatening condition. A continuing goal of the Service's effort is to remove sites that are listed in the Secretary's report of the previous fiscal year to the Congress.

National Recreation and Preservation Programs/Natural Programs

Workload Indicators for Fiscal 1987

- -- Ten potential landmarks will be nominated by the Director of the National Park Service for designation by the Secretary of the Interior.
- -- Approximately 250 landmarks will be reviewed for preparation of annual report to Congress on threatened and damaged national natural landmarks.
- -- Secretary of the Interior's Significance Criteria for National Natural Landmarks will be issued.
- -- Fifteen percent of sites listed on the fiscal 1984 "Section 8" report will be targeted for direct technical assistance to owners or administrators to alleviate or remove the damaging or threatening condition.
- -- Analyze the effectiveness of the Section 8 monitoring process and develop recommendations for improvement including the interpretation of the resulting data to better assess the status of these nationally significant properties.

Decrease for 1987		1987 Base	1987 Estimate	Decrease
State and Local River	$	1,653	541	-1,112
Conservation Assistance	(FTE-T)	(53)	(9)	(-44)

For fiscal 1987, financial assistance to State and local governments for rivers and trails conservation will be eliminated. The Service believes direct Federal assistance for this program is not a high priority at this time because of the need to reduce the deficit and the rate of Federal spending. Moreover, Federal support is not essential to continue river and trail conservation work at the State and local level where sufficient interest and expertise is available.

Distribution of decrease by object class

	FTE	Amount
Personnel compensation	-44	-$993,000
Personnel benefits		-109,000
Travel and transportation of persons		-10,000
Total		-$1,112,000

Justification of Program and Performance

Activity: National Recreation and Preservation
Subactivity: National Register Programs

(dollar amounts in thousands)

Program Elements		FY 1986 Estimate	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
National Register	($)	6,843	6,549	6,843	6,843	--
Programs	(FTE-T)	(174)	(174)	(174)	(174)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
National Register Programs	6,843	-294	6,549

As a result of the $294,000 P.L. 99-177 reduction, technical assistance in all National Register Programs areas will be delayed, including tax benefits certification, data base development activities, and planning assistance to Federal and State agencies.

Authorization

Public Law 74-292	Historic Sites Act of 1935
Public Law 89-665	National Historic Preservation Act of 1966, as amended
Public Law 91-383	National Park System General Authorities Act, as amended
Public Law 93-291	Archeological and Historic Preservation Act of 1974
Public Law 94-455	Tax Reform Act of 1976
Public Law 96-95	Archeological Resources Protection Act of 1979
Public Law 97-34	Economic Recovery Act of 1981

Objectives

To support the public and private preservation of the nation's historical and cultural heritage and the integration of preservation values in public and private decisions by: (1) promoting and assisting sound stewardship of Federally owned or controlled cultural resources (2) identifying and registering historic properties in the National Register of Historic Places; (3) creating documentary records of historic properties through the Historic American Buildings Survey and Historic American Engineering Record; (4) cooperating with non-Federal preservation institutions; (5) providing information, data, and advice to individuals and organizations on appropriate preservation techniques and methods; and (6) responding to taxpayers' requests for certification for Federal tax incentives.

National Register Programs

Base Program

1. Maintenance of the National Register of Historic Places.................................. $1,001 30 FTE

The National Register of Historic Places is the nation's official list of properties significant in American history, architecture, archeology, engineering, and culture. The National Historic Preservation Act, as amended, directs the Secretary of the Interior to maintain the National Register; to develop guidelines, and regulations for nomination; to consider appeals; and to make determinations of eligibility of properties at the request of Federal agencies and where private property owners object to listing.

The State Historic Preservation Officer sets priorities for nominations, notifies local officials and property owners of proposed nominations, and submits completed nominations. Federal agencies nominate properties under their jurisdiction. The National Register staff processes and lists up to 5,000 nominations annually, publishes the list of pending nominations in the "Federal Register," conducts review of nominations, and lists, returns, or rejects nominations.

All nominations are reviewed for technical sufficiency and to assure that all necessary documentation has been submitted. Based on the past performance record of the State or Federal agency, a sample of nominations is given an indepth review to assure that the nominations meet the criteria for evaluation.

The National Register staff reviews requests for determinations of eligibility within 10 days of receipt when a Federal agency and the SHPO agree that a property meets National Register criteria. When a Federal agency and SHPO disagree, however, a detailed substantive review is conducted and a decision made within 45 days.

In fiscal 1987, the computerization of the National Register records will be completed, and a system for computerizing records as they are submitted will be in place. Fiscal 1987 emphasis will be on updating and correcting data. This will permit rapid access to the National Register's contents by Federal agencies and the public for purposes of protecting properties, Tax Act certifications, program analysis and research. In addition, there will be ongoing training workshops for Federal and State personnel to improve the National Register nomination and registration process.

Standards, guidelines, and technical information concerning the registration process and the determination of eligibility process are provided to States, Federal agencies, local governments, and others.

Properties will also be recommended to the Secretary of the Interior for designation as National Historic Landmarks. Four theme studies will be undertaken involving the study of several hundred properties, and some 50 properties will be designated by the Secretary.

National Register Programs

Workload Indicators	Fiscal 1985	Fiscal 1986	Fiscal 1987
Nominations Submitted	3,700	3,800	3,800
Technical Bulletins	10	10	10
Training Workshops	10	25	10
Determinations of Eligibility (Federal)	1,100	1,100	1,100
Determinations of Eligibility (owner objection)	200	200	200
Nomination Appeals	10	30	35
NHL Theme Studies	4	4	4
NHL's Designated	65	50	50

2. Preservation Assistance and Certification for Federal tax benefits.......................... $2,845 75 FTE

The National Park Service develops technical information, guidelines, and training materials that assist property owners in undertaking responsible historic preservation work for the protection of the nation's historic resources. The 1980 Amendments to the Historic Preservation Act direct professional methods be developed for use by Federal agencies, State and local governments, private organizations and individuals for the preservation and rehabilitation of historic properties. The demand for responsible technical information generated by the tax incentives program requires that the preservation assistance provided by the Service be continued.

Technical assistance is provided to National Historic Landmark owners to adopt management practices which protect nationally significant values. In fiscal 1986, an inspection program for threatened National Historic Landmarks was continued. In fiscal 1987, approximately 20 additional threatened National Historic Landmarks will be targeted for inspection, documentation, production of preservation reports, and technical assistance to implement preservation recommendations. Workload associated with developing technical information, guidelines, and training will continue. Through a cooperative agreement with Georgia Tech, the National Park Service has begun to develop and make available to States and Federal agencies a computerized data base of information relating to preservation technology. In 1985, a listing of testing labs for historic building materials was issued; in 1986 a data base of masonry treatment products was issued.

The Tax Reform Act of 1976, the Revenue Act of 1978, and the Economic Recovery Tax Act of 1981 require the Secretary to make certifications of historic district statutes and of State and local districts; certifications as to whether a structure contributes to the significance of a registered historic district, and certifications of rehabilitation in connection with tax incentives. To qualify for the incentives, property owners must establish:

- -- that the property is a certified historic structure (Part I); and
- -- that the rehabilitation work will preserve the historic character of the structure (Part II)

States may advise the National Park Service on certification requests. State suggestions and the application materials are then professionally evaluated in five National Park Service Regional Offices according to standards published in 36 CFR, part 67. Notification as to certification normally is made within 60 days of the owner's initial submission. Applications may be submitted at any time during the course of rehabilitation work, although owners are encouraged to submit proposals prior to beginning work. Denials of part I and part II applications may be appealed by the applicant to the Washington Office.

Workload will increase for certification of historic significance and of rehabilitation in fiscal 1987. In addition, the level of effort necessary to provide technical information and guidance on historic preservation to the private constituency involved in rehabilitation work will also increase.

Workload Indicators	Fiscal 1986	Fiscal 1987
Part I applications	3,475	3,580
Part II applications	4,895	5,045
Certification of State and local statutes	33	35
Certification of State and local districts	27	30
Part I appeals	15	18
Part II appeals	130	140

3. Standards and Cultural resources management planning.............................. $566 19 FTE

Section 110(a)(2) of the National Historic Preservation Act (NHPA) provides for the Secretary to advise Federal agencies on establishing a program to locate, inventory, and nominate properties under their control that appear to qualify for inclusion in the National Register. Sections 101(f) and 101(q) require the Secretary to promulgate standards and guidelines for accomplishing these and other Federal agency responsibilities mandated by section 110. Section 101(h) requires the Secretary to provide training, information, and professional methods and techniques for preserving historic properties and for administering historic preservation programs.

The NPS will continue to implement the Secretary's archeological and historic preservation standards and guidelines. The standards serve as benchmarks for measuring the effectiveness of preservation planning, identification, evaluation, registration, and treatment for all types of cultural resources. The guidelines structure the survey process, provide for evaluation and registration of cultural resources in historic context, provide for registration of archeological and historic properties, and guide appropriate treatment of these properties. Technical assistance from the NPS enables Federal agencies and others to apply the standards to their own programs.

Regions assist Federal and State agencies in conducting projects that adapt the resource protection planning process to the needs of the agency and lead to its implementation by the agency. Technical training to Federal and State agencies will continue. National Register Program staff advises and assists National Park Service Regions and parks in developing and implementing improved cultural resources management approaches.

National Register Programs

NPS has developed a process for approving State historic preservation programs. During fiscal 1987 the Service will complete the second series of reviews and approvals of State programs.

4. Archeological Resource Management.................. $1,392 23 FTE

There is growing recognition of the need for better Governmentwide coordination of archeological programs. In some cases, Federal agencies still destroy important archeological resources without taking steps that might have preserved the sites or recovered the data. On the other hand, agencies sometimes spend excessive amounts to excavate sites with little beneficial result. The National Park Service is required to report annually to Congress on the scope, effectiveness, cost, and benefits of Governmentwide data recovery activities and on actions taken and changes needed to facilitate the preservation of antiquities. During 1987, the Service will use its perspective from this reporting requirement, coupled with its authorities to advise and assist Federal agencies, to improve the working of archeological programs throughout the Government.

Archeological components of the Standards and Guidelines mentioned under number 3 (above) will be made the focal point of archeological programs in the National Park Service, and of advice and assistance rendered to other Interior bureaus and to other Federal agencies. Technical leaflets will be carefully designed to elaborate on the Standards and Guidelines so as to build a clearer and stronger concensus among agencies about what constitutes good archeological practice and what does not.

The Service receives notifications that archeological resources may be endangered by Federal projects, investigates to determine if important data are involved; provides advice and assistance for appropriate salvage or preservation efforts; helps agencies define the level and type of work required; monitors data recovery through review of project reports; and ensures compliance with Federal requirements and arranges contracts with qualified professionals. Consultation and technical assistance are also provided to Federal agencies on the location, evaluation, nomination, and preservation of archeological properties.

NPS concentrates on guiding Governmentwide archeology and on improving the archeological capability of other agencies and will limit its direct assistance to agencies that are unable to do their own archeological work. These activities will have the dual objective of solving specific archeological problems and improve the independent capabilities of other agencies.

During fiscal 1987, work will continue on the automated data base of archeological project reports. Regions will continue to collect bibliographic data, maintain the system, and provide access to the data base for Federal and State agencies in order to reduce redundancy in planning and survey efforts. The Washington Office will coordinate these activities to ensure that work is completed in a uniform manner.

National Register Programs

Processing and issuance of Antiquities and ARPA permits has been transferred to the individual land managing agencies and to the Regional level within the NPS. The Washington Office will retain oversight, ensuring compliance with the Uniform Rules and Regulations of the Antiquities Act and the Archeological Resource Protection Act.

5. Record historic architectural, engineering, and industrial sites, and transmit documentation to the Library of Congress...........	$866	22	FTE

The Historic American Buildings Survey and the Historic American Engineering Record (HABS/HAER) document significant examples of the nation's architectural and engineering heritage through historical information; measured drawings; and photographic techniques including photography as well as photogrammetry. This documentation is used to provide a basis for preservation planning; to allow accurate repair or reconstruction if the property is damaged by fire or other disaster; to serve as a beginning point for restoration or adaptive reuse; to provide a legally enforceable basis for preservation easements; to preserve a record of historic properties that cannot be preserved; and to provide comprehensive information for those interested in historic structures. Most documentation is produced by summer field teams under the direct supervision of HABS/HAER personnel; through materials produced by architects and other professionals; and through contractors working to HABS/HAER standards and subject to HABS/HAER approval.

The HABS/HAER collections, kept by the Library of Congress, are the largest of their kind in the world. They include records on approximately 20,100 buildings and structures in the form of 44,500 sheets of drawings and 111,000 photographs with 57,000 accompanying data pages. These collections are among the most extensively used of all the special collections in the Library of Congress, with about 20,000 items reproduced each year for professionals, scholars, and the general public. An NPS-developed computer system provides access to the HABS/HAER records. Duplicates of the Library of Congress materials are maintained at 110 libraries and institutions throughout the United States.

In fiscal 1986, highest priority will continue to go to documentation of historic structures managed by the National Park Service, and of a wide range of National Historic Landmarks.

6. Advise Congress on the status of threatened National Historic Landmarks, and define National Historic Landmark Boundaries..............	$173	5	FTE

The National Park Service prepares the annual "Section 8" report to Congress describing the status of historic and archeological resources of national significance (National Historic Landmarks) whose historic integrity is damaged or threatened. Over 1,600 landmarks are monitored by NPS Regional Offices working with State Historic Preservation offices, the National Trust for Historic Preservation, local government officials, local preservation organizations, and landmark owners. Significant improvements in the inspections of landmarks were initiated in fiscal 1985, resulting in more accurate evaluation of the condition of landmarks and the costs necessary to preserve them. Onsite visits are made, if necessary. The fiscal 1985 report cites 49 national historic landmarks as being threatened or damaged.

Since national historic landmarks receive the same degree of protection afforded other properties listed on the National Register of Historic Places, documentation to these landmarks must be brought up to National Register standards. Landmarks established prior to 1966 were subsequently listed in the National Register without boundaries and, thus, do not meet these standards. In fiscal 1987, the emphasis will shift to correcting boundary descriptions of national historic landmarks with boundaries which do not adequately define the landmark. In fiscal 1987, pursuant to section 101(a)(1)(A) of the National Historic Preservation Act, adequate boundaries will be corrected for about 50 of these national historic landmarks.

Justification of Program and Performance

Activity: National Recreation and Preservation Programs
Subactivity: Environmental Compliance and Review

(dollar amounts in thousands)

Program Elements		FY 1986 Estimate	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Environmental Compliance and Review	($)	400	383	400	400	--
	(FTE-T)	(8)	(8)	(8)	(8)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Environmental Compliance and Review	400	-17	383

As a result of the $17,000 P.L. 99-177 reduction, travel will be reduced by 40 percent (-$8,000) and the acquisition of ADP equipment and related supplies and equipment will be deferred (-$9,000).

Authorization

Public Law 88-29	Outdoor Recreation Act
Public Law 91-190	National Environmental Policy Act
Public Law 89-670	Department of Transportation Act
Public Law 90-542	Wild and Scenic Rivers Act
Public Law 88-578	Land and Water Conservation Fund Act
Public Law 97-348	Coastal Barrier Resources Act
Public Law 94-280	Federal Aid Highway Act of 1976
Public Law 95-625	National Parks and Recreation Act of 1978
Public Law 90-543	National Trails System Act

Objectives

To complete timely and effective reviews and comments on environmental impact statements; DOT section 4(f) statements; Federal licensing and permitting applications; and proposed legislation, rulemaking, regulations, guidelines, executive orders, wild and scenic rivers, national trails, wilderness, resource area plans, recreation composites, Federal surplus property transfers, and related projects and undertakings. This review and comment process assists in the implementation of the Director's 12-Point Plan through protection of natural, cultural, and recreational resources (Point 1); pursuing a creative, expanded protection initiative (Point 2); helping the public to better understand critical resources issues (Point 4); and achieving a better balance between visitor use and resource management (Point 7).

National Recreation and Preservation Programs/Environmental Compliance and Review

Base Program

The review of environmental and related documents is necessary under the given authorities for the Service to react to proposals of other Federal agencies which may impact areas of Service jurisdiction or expertise. As such, it is effective to the Service for maintaining the integrity of the National Park System. Many reviews are mandated by the Council on Environmental Quality regulations (40 CFR 1503.2). Other review requirements arise from legislative and executive mandates which require that the Service exercise a stewardship role for the natural, cultural, and recreational resources in the National Park System. The Service is mandated to protect recreation and historic sites from adverse Federal transportation proposals under section 4(f) of the Department of Transportation Act which requires continuing cooperation and consultation between the Department of Transportation and the Department of the Interior. The Service is also mandated to protect properties acquired, developed or preserved through NPS grant programs and to protect other areas, such as wild and scenic rivers, cultural sites and segments of the National Trail System. Through environmental and related document reviews, the Service receives "early warnings" of other Federal proposals and often can negotiate differences before another agency is committed to a course of action. The environmental review process strengthens the protection of natural, cultural, and recreational resources (Goal 1 in the Director's 12-Point Plan).

Leadership, guidance, and training are provided by the Washington Office to Regional and park personnel responsible for the review of environmental and related documents. The Service coordinates NPS review activity with the Department's Office of Environmental Project Review. Proposed consolidated Departmental review comments are prepared, which include the comments of other Interior bureaus.

The Service maintains a central control system for receiving and logging approximately [illegible] incoming environmental and related documents annually. Review responsibility is assigned to assure timely responses. Annually, the Service prepares [illegible] letters to the Department of Transportation for Secretarial signature and [illegible] reviews on other transportation-related matters. An estimated [illegible] review comments on license and permit applications are prepared which would involve recreation, historic or archeological resources. Finally, [illegible] review comments on proposed regulations and other miscellaneous proposals are completed for a total of [illegible] comment letters and other documents annually.

Review accomplishments are attained on both a programmatic and site-specific level. Although the number of documents coming to the Service is extremely large, reviewers have been successful in screening down the proposals that really affect areas of NPS jurisdiction and expertise. On a site-specific basis, the Service responds to hundreds of proposals that may or could adversely impact the following:

-- National Park System units. An example, the consultation review process under section 4(f) with respect to the improvement of U.S. Route 27 through Chickamauga and Chattanooga National Military Park has resulted in reexamination of alternatives and the recent Secretary's decision to relocate U.S. Route 27 near the eastern boundary of the park or outside

outside the park, thus protecting this major historic resource. Also, the NPS responded to hydroelectric proposals in Grand Teton National Park and in Lake Mead, Big Horn Canyon, and Glen Canyon National Recreation Areas. The Federal Energy Regulatory Commission (FERC) and the applicants for these proposals were informed that FRRC lacks authority to license the development of hydroelectric projects in units of the National Park System. These actions help protect natural, cultural, and recreational resources (Point 1 of the Director's 12-Point Plan).

-- Other park and recreational areas, including areas which the Service has funded through the Land and Water Conservation Fund or the Urban Park and Recreation Program. NPS also advocated the provision of adequate recreational facilities at hundreds of hydropower sites under a working arrangement between NPS and the Federal Energy Regulatory Commission and prepared scores of proposed Secretarial "section 4(f)" consultation comments. Under section 4(f) of the Department of Transportation Act, the Department of the Interior and NPS are consulted on Federally assisted transportation proposals which would adversely affect a public park or any historic site. Comments either minimized taking or called for adequate mitigation to compensate for the effects of the taking.

-- Cultural resource areas. In this category, NPS also prepared scores of Secretarial section 4(f) consultation comments which either minimized transportation takings of historic sites or called for adequate mitigation of the taking. Examples of recreational and cultural resource area section 4(f) correspondence are available upon request.

Justification of Program and Performance

Activity: National Recreation and Preservation
Subactivity: Grants Administration

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Urban Parks and Recreation Recovery Administration	($)	357	341	357	357	--
	(FTE-T)	(15)	(15)	(15)	(15)	(--)
Historic Preservation Fund Administration	($)	1,149	1,100	1,149	1,122	-27
	(FTE-T)	(20)	(20)	(20)	(19)	(-1)
Total Requirements	($)	1,506	1,441	1,506	1,479	-27
	(FTE-T)	(35)	(35)	(35)	(34)	(-1)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Urban Parks and Recreation Recovery Administration	357	-16	341
Historic Preservation Fund Administration	1,149	-49	1,100
Total	1,506	-65	1,441

As a result of the $65,000 P.L. 99-177 reduction, processing time of guarantee reimbursements, project amendments planning, grant proposals and closeout activities will be increased. The number of compliance inspections will be reduced.

Authorization

P.L. 95-625, Title X	Urban Park and Recreation Recovery Act of 1978
P.L. 89-665	National Historic Preservation Act

Objectives

Urban Parks and Recreation Recovery Program:

To administer grants awarded in prior years to local jurisdictions in a responsive and accountable manner.

National Recreation and Preservation/Grants Administration

Historic Preservation Fund:

To provide technical guidance and oversight to accomplish prompt completion and closeout of prior years' grants responsibly and accountably so that the interests of the Federal Government are protected; to continue mandated activities that remain in place without further Historic Preservation Fund financial assistance to States.

Base Program:

Urban Park and Recreation Recovery Program

The base program covers the costs of closing out prior year rehabilitation, innovation and recovery action program grants and mandated compliance activities for previously assisted sites. With no appropriation for grants in fiscal 1986, workloads for active grants will continue to decrease during this year. Funded activities in fiscal 1985 included: processing of 750 billings and amendments and 173 grant closeouts; 250 compliance inspections; review of programs and completion reports on 125 recovery action planning grants; and resolution of audit and compliance questions on 50 grants. Base program activity measures for fiscal 1986 are:

Number of active grants	156
Estimated unexpended Federal grant funds at the start of fiscal year	$21,793,382

Historic Preservation Fund

With no funds requested for Historic Preservation Fund grants in fiscal 1987, administrative costs devoted to administration of new grants will cease, but existing personnel resources will be needed to continue activities that remain in place and to manage the spendout from prior years' appropriations. The base program includes the range of activities required for responsible closeout of existing financial grant obligations. The fiscal and compliance responsibilities for HPF grants are required by OMB Circulars A-87, A-102, A-128, and the Act. Workload includes processing of 250 billings; 500 program or project amendments; action on 57 End-of-Year Reports and an estimated 950 subgrant completion reports. The base program activity measures for fiscal 1987 are:

Number of active grants..................................	115
Estimated Federal funds obligated but unexpended at the start of fiscal 1987..	$17,000,000

Activities continuing without further financial assistance include: 1) Providing guidance, planning assistance, and technical support functions to States that voluntarily continue historic preservation functions, such as nominations to the National Register, certification of rehabilitation for Federal tax benefits, comprehensive historic preservation planning, monitoring and enforcing protective covenants on over 6,000 properties for which matching grant funds were used for acquisition on development; 2) conducting at least 20 State Program Reviews, required by Section 101(b)(2) of the Act for continuing State programs; 3) responding to requests from States for advice and assistance, particularly those with decreased staff resources, to ensure that accountability and compliance with laws and regulations are maintained until active grants are closed out, and that continuing activities are performed according to terms of subsequent agreements.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	1,506	1,479	-27
(FTE-T)	(35)	(34)	(-1)

The Service anticipates a continued decrease in requirements for Grants Administration as the closeout of prior year grants continue. No new Urban Park and Recreation Recovery program funds have been appropriated since 1984, and the level of grant administration funds and FTE-T requested for this program for 1987 is sufficient. Although Historic Preservation grant funds were appropriated in fiscal 1986, no new budget authority is requested in fiscal 1987 for the administration of active grants, and the Service has determined that further savings in grant administration for Historic Preservation Fund can be achieved (-$27,000, 1 FTE-T).

Distribution of decrease by object class

	FTE-T	Amount
Personnel compensation	-1	-$24,000
Personnel benefits		-3,000
Total	-1	-27,000

Summary of Requirements by Object Class
(Dollar Amounts in Thousands)

Appropriation: National Recreation and Preservation

Object Class:		1987 Base FTE	1987 Base Amount	1987 Estimate FTE	1987 Estimate Amount	Inc. (+) or Dec. (-) FTE	Inc. (+) or Dec. (-) Amount
11.	Personnel compensation:						
11.1	Permanent full-time equivalencies	226	6,169	185	5,058	-41	-1,111
11.3	Other than permanent full-time equivalencies....................	57	1,590	47	1,303	-10	-287
11.5	Other personnel compensation.......	—	110	--	90	—	-20
11.9	Total personnel compensation.......	283	7,869	232	6,451	-51	-1,418
	Other Objects:						
12.1	Personnel benefits.................		968		793		-175
21.0	Travel and transportation of persons		529		504		-25
22.0	Transportation of things...........		17		18		+1
23.2	Communications, utilities and other rent............................		49		53		+4
24.0	Printing and reproduction..........		139		141		+2
25.0	Other services.....................		1,115		1,286		+171
26.0	Supplies and materials.............		181		153		-28
31.0	Equipment..........................		152		141		-11
32.0	Lands and structures...............		7		5		-2
42.0	Insurance claims and indemnities...		3		2		-1
	Total requirements.................		11,029		9,547		-1,482

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL RECREATION AND PRESERVATION

Program and Financing (in thousands of dollars)

Identification code 14-1042-0-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
1. Recreation programs..................	616	627	231
2. Natural programs.....................	1,669	1,653	541
3. Cultural programs....................	6,420	6,843	6,885
4. Environmental compliance and review..........................	392	400	402
5. Grant administration................	1,639	1,506	1,488
10.00 Total obligations..................	10,736	11,029	9,547
Financing:			
25.00 Unobligated balance lapsing.........	375	--	--
39.00 Budget authority....................	11,111	11,029	9,547
Budget authority:			
40.00 Appropriation.......................	11,111	11,096	9,547
40.00 Reduction pursuant to Public Law 99-190.......................	--	-67	--
43.00 Appropriation (adjusted)............	11,111	11,029	9,547
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	10,736	11,029	9,547
72.40 Obligated balance, start of year....	2,464	2,306	1,103
74.40 Obligated balance, end of year......	-2,306	-1,103	-955
77.00 Adjustments in expired accounts.....	-315	--	--
90.00 Outlays.............................	10,578	12,232	9,695

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL RECREATION AND PRESERVATION

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-1042-0-1-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority..........................	11,111	11,029	9,547
Outlays..................................	10,578	12,232	9,695
Reduction pursuant to P.L. 99-177:			
Budget authority..........................	--	-474	--
Outlays..................................	--	-427	-47
Total:			
Budget authority..........................	11,111	10,555	9,547
Outlays..................................	10,578	11,805	9,648

Object Classification (in thousands of dollars)

Identification code 14-1042-0-1-303	1985 actual	1986 estimate	1987 estimate
Personnel compensation:			
11.1 Full-time permanent..................	5,856	6,169	5,058
11.3 Other than full-time permanent.......	1,509	1,590	1,303
11.5 Other personnel compensation.........	87	110	90
11.8 Special personal services payments...	13	--	--
11.9 Total personnel compensation.........	7,465	7,869	6,451
Personnel benefits:			
12.1 Civilian.............................	856	968	793
21.0 Travel and transportation of persons............................	463	529	504
22.0 Transportation of things.............	31	17	18
23.3 Communications, utilities and miscellaneous charges..............	38	49	53
24.0 Printing and reproduction............	156	139	141
25.0 Other services.......................	1,293	1,115	1,286
26.0 Supplies and materials...............	231	181	153
31.0 Equipment............................	203	152	141
32.0 Lands and structures.................	--	7	5
42.0 Insurance claims and indemnities.....	--	3	2
99.0 Total obligations....................	10,736	11,029	9,547

Personnel Summary

Identification code 14-1042-0-1-303	1985 actual	1986 estimate	1987 estimate
Total number of full-time permanent positions	230	230	185
Total compensable workyears:			
Full-time equivalent employment	271	283	232
Full-time equivalent of overtime and holiday hours	1	1	1
Average GS grade	10.53	10.70	10.70
Average GS salary	27,546	27,807	27,807

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL RECREATION AND PRESERVATION

Program and Financing (in thousands of dollars)

Identification code 14-1042-6-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	--	-474	--
Financing:			
40.00 Budget authority (appropriation)....	--	-474	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-474	--
72.40 Obligated balance, start of year....			-47
74.40 Obligated balance, end of year......	--	47	--
90.00 Outlays.............................	--	-427	-47

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

Appropriation Summary Statement

Appropriation: Construction

Funds budgeted under this appropriation provide for the construction of new visitor facilities and support systems, the reconstruction and repair of operational structures and recreational facilities, and the preservation of historic and cultural resources. Funded activities include: (1) Line Item Projects; (2) Emergency and Unscheduled Projects; and (3) Advance and Project Planning.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

CONSTRUCTION

For construction, improvements, repair or replacement of physical facilities, without regard to the Act of August 24, 1912, as amended (16 U.S.C. 451), [$114,121,000,] to remain available until expended, $29,114,000, of which $8,500,000 shall be derived by transfer from the National Park System Visitor Facilities Fund [; including $3,168,000 to carry out the provisions of section 303 and 304 of Public Law 95-290; including, subject to authorization, $8,100,000 to be expended for engineering and construction of the Burr Trail National Rural Scenic Road in and adjacent to the Capitol Reef National Park and the Glen Canyon National Recreation Area and an interpretive center near the town of Boulder, Utah, such funds to be transferred to the State of Utah for accomplishment of these activities in accordance with the provisions of a cooperative agreement to be developed among the National Park Service, the Bureau of Land Management, Garfield County, and the State of Utah: Provided, That appropriations for maintenance and improvement of roads within Capitol Reef National Park and Glen Canyon National Recreation Area and construction and maintenance of an interpretative center shall hereafter be available for such purposes without regard to whether title to such road rights-of-way or lands for the interpretive center is in the United States: Provided further, That in the event the National Park Service fails to maintain the road as provided under the terms of said cooperative agreement, any rights-of-way which may be transferred to the National Park Service will revert to Garfield County: Provided further, That in the event of reversion of the road to Garfield County, the county shall provide payment to the United States of an amount based upon the depreciated value of the capital investment resulting from Federal funds expended on the road for construction purposes; and including $2,000,000 to assist local communities to protect Mammoth Cave National Park from groundwater pollution: Provided further, That the National Park Service share of the Mammoth Cave protection project shall not exceed 25 per centum: Provided further, That for payment of obligations incurred for continued construction of the Cumberland Gap Tunnel, as authorized by section 160 of Public Law 93-87, $10,300,000, to be derived from the Highway Trust Fund and to remain available until expended to liquidate contract authority provided under section 104(a)(8) of Public Law 95-599, as amended, such contract authority to remain available until expended: Provided further, That funds made available pursuant to this Act for the Cumberland Gap Tunnel shall only be available when the States of Kentucky and Tennessee have entered into an agreement with the National Park Service to operate and maintain all portions of U.S. Route 25E, including the Tunnel, within the boundaries of the Cumberland Gap National Historic Park].

(16 U.S.C. 1, 1b, 7a-7e, 431-433, 452a, 469h; 40 U.S.C. 484k; 43 U.S.C. 620 (g); 50 U.S.C. 1622-h (1): Act of August 31, 1965 (79 Stat. 558); Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Appropriation Language Citations

National Park Service

Appropriation: Construction

1. For construction, improvements, repair or replacement of physical facilities,

16 U.S.C. 1, 1c, 7a-7o, 461-467
43 U.S.C. 620 (g)

16 U.S.C. 1, 1c, 7a-7o, 461-467 (1) provides for the creation of the National Park Service and defines the National Park System, (2) provides for the Secretary of the Interior to plan, acquire, establish, construct, enlarge, improve, maintain, equip, regulate, and protect airports in, or in close proximity to national parks, monuments, and recreation areas when such airport is included in the current national airport plan of the Federal Aviation (3) provides for the Secretary of the Interior to acquire property and to restore, reconstruct, rehabilitate, preserve, and maintain historic and prehistoric sites, buildings, objects, and properties of national historical or archeological significance.

43 U.S.C. 620(g) provides, in connection with the development of the Colorado River Storage Project and of participating projects, for authorization to investigate, plan, construct, operate, and maintain public recreational facilities on lands withdrawn or acquired for the development of said projects, and to conserve the scenery, the natural, historic, and archeological objects, and the wildlife on said lands, and to provide for public use and enjoyment of the same and of water areas created by these projects.

2. without regard to the Act of August 24, 1912, as amended (16 U.S.C. 451), $__________.

16 U.S.C. 451

16 U.S.C. 451 states that without the express authority of the Congress, no expenditure can be made for construction of an administration building or other building in any national park if the cost exceeds $3,000.

3. to remain available until expended,

No specific authority

This appropriation involves development programs which require more than a 1-year cycle from their beginning stages through the actual construction of facilities. This applies to both preauthorization planning for areas that have been proposed as additions to the National Park System, and post-authorization planning for existing areas and those newly added to the National Park System. Both of these are preceded by reconnaissance studies that vary in style and duration and can be relatively simple or extremely complex. It is in the latter situation where more than a year may be required for completion of a program.

4. of which $__________ shall be derived by transfer from the National Park Service Visitor Facilities Fund.

P.L. 97-433

Public Law 97-433 established the Visitor Facilities Fund for reconstruction, rehabilitation, replacement, improvement, relocation, or removal of concessioner-operated visitor facilities within the National Park System.

Justification of Proposed Language Changes

Construction

1. Deletion: "; including $3,168,000 to carry out the provisions of sections 303 and 304 of Public Law 95-290; including, subject to authorization, $8,170,000 to be expended for engineering and construction of the Burr Trail National Rural Scenic Road in and adjacent to the Capitol Reef National Park and the Glen Canyon National Recreation Area and an interpretive center near the town of Boulder, Utah, such funds to be transferred to the State of Utah for accomplishment of these activities in accordance with the provisions of a cooperative agreement to be developed among the National Park Service, the Bureau of Land Management, Garfield County, and the State of Utah: Provided, That appropriations for maintenance and improvement of roads within Capitol Reef National Park and Glen Canyon National Recreation Area and construction and maintenance of an interpretative center shall hereafter be available for such purposes without regard to whether title to such road rights-of-way or lands for the interpretive center is in the United States: Provided further, That in the event the National Park Service fails to maintain the road as provided under the terms of said cooperative agreement, any rights-of-way which may be transferred to the National Park Service will revert to Garfield County: Provided further, That in the event of reversion of the road to Garfield County, the County shall provide payment to the United States of an amount based upon the depreciated value of the capital investment resulting from Federal funds expended on the road for construction purposes; and including $2,000,000 to assist local communities to protect Mammoth Cave National Park from groundwater pollution: Provided further, That the National Park Service share of the Mammoth Cave protection project shall not exceed 25 per centum: Provided further, That for payment of obligations incurred for continued construction of the Cumberland Gap Tunnel, as authorized by section 160 of Public Law 93-87, $10,300,000, to be derived from the Highway Trust Fund and to remain available until expended to liquidate contract authority provided under section 104(a)(8) of Public Law 95-599, as amended, such contract authority to remain available until expended: Provided further, That funds made available pursuant to this Act for the Cumberland Gap Tunnel shall only be available when the States of Kentucky and Tennessee have entered into an agreement with the National Park Service to operate and maintain all portions of U.S. Route 25E, including the Tunnel, within the boundaries of the Cumberland Gap National Historic Park"

   Funds for the above items are not requested in fiscal 1987 and related provisions shown above have accomplished their purpose. Therefore, this language is no longer necessary.

NATIONAL PARK SERVICE

Budgetary Resources for Construction

Account: Construction (14X1039)

FY 1986 Budgetary Status

Budget authority available:		
Appropriation realized		113,436,000
Other prior-year unobligated balance brought forward		92,238,000
Total BA available for obligation		205,674,000
Less anticipated obligations (by activity):		
1. Line item construction	-94,771,000	
2. Emergency and unscheduled projects	-2,981,000	
3. Planning	-15,684,000	
Total anticipated obligations		-113,436,000

FY 1987 Request

Anticipated unobligated balance brought forward		92,238,000
Plus increases proposed (by activity):		
1. Line item construction	+19,318,000	
2. Emergency and unscheduled projects	+2,000,000	
3. Planning	+7,796,000	
Total increase proposed		+29,114,000
Total anticipated BA available for obligation		121,352,000

NATIONAL PARK SERVICE

Analysis of Budgetary Resources by Activity

Account: Construction (14X1039)

Activity	FY 1985 Appropriation	FY 1986 Appropriation	FY 1987 Appropriation	FY 1987 Inc.(+)/Dec.(-) from 1986 Appropriation
1. Line Item Construction				
BA available for obligation:				
Appropriation	$ 92,247,000	86,270,000	13,261,000	-73,009,000
Transfer from Vis. Fac. Fund	—	8,500,000	6,057,000	-2,443,000
Transfer to ONPS	-9,500,000	—	—	—
Unoblig. bal. brt. fwd.	84,308,000	82,737,000	82,737,000	—
Recovery of prior-year obligations	1,533,000	—	—	—
Total BA available	168,588,000	177,507,000	102,055,000	-75,452,000
Less obligations	-85,851,000	-94,770,000	-38,300,000	+56,470,000
Unoblig. balance brt. fwd. ...	82,737,000	82,737,000	63,755,000	-18,982,000
(FTE-T)	(571)	(603)	(461)	(-142)
2. Emergency and Unscheduled Projects				
BA available for obligation:				
Appropriation	2,940,000	2,981,000	2,000,000	-981,000
Unoblig. bal. brt. fwd.	1,388,000	1,724,000	1,724,000	--
Total BA available	4,328,000	4,705,000	3,724,000	-981,000
Less obligations	-2,604,000	-2,981,000	-2,700,000	+281,000
Unoblig. balance brt. fwd. ...	1,724,000	1,724,000	1,024,000	-700,000
(FTE-T)	(--)		(--)	(--)
3. Planning				
BA available for obligation:				
Appropriation	15,858,000	15,685,000	5,353,000	-10,332,000
Transfer from Vis. Fac. Fund	--	--	2,443,000	+2,443,000
Unoblig. bal. brt. fwd.	7,550,000	7,777,000	7,777,000	--
Total BA available	23,408,000	23,462,000	15,573,000	-7,889,000
Less obligations	-15,631,000	-15,685,000	-10,000,000	+5,685,000
Unoblig. balance brt. fwd. ...	7,777,000	7,777,000	5,573,000	-2,204,000
(FTE-T)	(--)	(--)	(--)	(--)
Account Total				
BA available for obligation:				
Appropriation	111,045,000	104,936,000	20,614,000	-84,322,000
Transfer from Vis. Fac. Fund	--	8,500,000	8,500,000	--
Transfer to ONPS	-9,500,000	--	--	--
Unoblig. bal. brt. fwd.	93,246,000	92,238,000	92,238,000	--
Recovery of prior-year obligations	1,533,000	--	--	--
Total BA available	196,324,000	205,674,000	121,352,000	-84,322,000
Less obligations	-104,086,000	-113,436,000	-51,000,000	+62,436,000
Unoblig. balance brt. fwd. ...	92,238,000	92,238,000	70,352,000	-21,886,000
(FTE-T)	(571)	(603)	(461)	(-142)

Justification of Program and Performance for Construction

Activity: Line Item Construction Projects

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Estimate	Dec. (-) Inc. (+) from 1986
Line Item Construction Projects:	$ (FTE-T)	94,770* (603)	90,695 (603)	19,318* (461)	-75,452 (-142)

*Includes $8,500 transferred from the Visitor Facilities Fund.

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Line Item Construction Projects	94,770	-4,075	90,695

Reductions required by P.L. 99-177 will mean that fund availability for each of the 40 fiscal 1986 appropriated construction packages will be decreased by 4.3 percent. For this year, it is hoped that sufficient funding will still be available to award and construct the full scope of each construction package. If the bidding climate is unfavorable and low bids consistently exceed the engineer's estimates, planned scopes of work may have to be decreased, and one or more projects may require reprogramming.

Authorization

16 U.S.C. 1

Objectives

The National Park Service Construction Program provides for the construction and rehabilitation of those facilities needed to accomplish the management objectives approved for each park. The National Park Service's physical plant includes over 16,000 permanent structures, 300 water and sewage treatment systems, nearly 8,000 miles of roadway and 1,400 bridges. The present worth of the National Park Service's physical facilities and roads is estimated in excess of $50 billion. Construction projects are programmed to provide access to park areas, rehabilitate historic structures, provide safe and sanitary water and sewer systems, to protect existing Federal investments in recreational facilities, and to develop newly authorized parks areas for visitor use and enjoyment.

Line Item Construction Projects

Activity Description

The need for all fiscal 1987 construction projects has been carefully evaluated and confirmed by the top management of the National Park Service. Care has been taken to ensure the accuracy of all construction cost estimates and that planning for all proposed projects has progressed to a stage which will permit project obligation during the fiscal year. Construction cost estimates are based on at least advance planning underway, and many estimates are based on nearly completed construction drawings. Wherever cost estimates are based upon preliminary planning, a compelling need (such as potential danger to the health or safety of the visiting public, violations of pollution or drinking water quality standards, etc.) has motivated the request for construction funding. All proposed construction has been reviewed for consistency with existing planning documents and National Park Service policy.

Fiscal 1987 Program

The fiscal 1987 funding level represents a minimum level necessary to address the most urgent health, safety, resource protection and facility repair needs of the Service. The 1987 Construction Program includes eight projects in seven park areas. Four projects, totaling over 60 percent of the budgetary request, represent planned fiscal 1987 phases of previously funded projects. All projects address health and safety or resource protection objectives. Three of the proposed construction projects utilize monies derived from the Visitor Facilities Fund.

All NPS construction activities are accomplished under the supervision of the professional engineering and design staff at the Denver Service Center. A separate design center at Harpers Ferry, West Virginia, provides the expertise for projects involving museum and/or audiovisual work. Qualified architectural and engineering firms are used in cases where it is cost-effective or where needed expertise is not available within the Service.

Federal Lands Highways Program

Since fiscal 1983, the requirements of the National Park Service for road and bridge repair rehabilitation, reconstruction and new construction have been met through the Federal Lands Highways Program. Authorized by the Surface Transportation Assistance Act of 1982, $375 million has been made available through the initial four year authorization of this program. These funds have been used to repair, reconstruct and construct roads and bridges at over seventy park areas. However, the $375 million made available to date has addressed less than half of the backlog of road and bridge construction and rehabilitation needs identified by the Service. Federal Highway Administration road and bridge inspection reports present a similar panorama, with over a billion dollars in outstanding road repair and rehabilitation needs identified.

The Service and the Department of the Interior are in favor of including the National Park Service in the proposed reauthorization of the Surface Transportation Assistance Act at an annual funding level of $75 million. A tentative 1987 Federal Lands Highways Program listing has been included.

Justification of Program and Performance for Construction

Activity: Unscheduled and Emergency Projects

(dollar amounts in thousands)

Program Elements		FY 1986 Estimate	1986 Adjusted Approp.	FY 1987 Estimate	Inc. (+) Dec. (-) from 1986
Emergency and Unscheduled Projects	$	2,981	2,853	2,000	-981
	(FTE-T)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Emergency and Unscheduled Projects	2,981	128	2,853

Reductions required by P.L. 99-177 will decrease the funding available for unanticipated emergency projects and for providing necessary infrastructure to support small concessioner facility expansion projects based upon the average size of prior year projects, two or three projects may be deferred.

Authorization

16 U.S.C. 1

Objectives

Perform minor unscheduled and emergency construction projects to protect and preserve park resources, provide for safe and uninterrupted visitor use of facilities, accommodate unanticipated concessioner facility related needs, provide necessary infrastructure for approved concessioner expansion projects, and ensure continuity of support and service operations.

Activity Description

Each year, throughout the National Park System, unanticipated minor construction needs arise, heating and cooling systems fail, utility systems expansions are needed to accommodate new facilities, storms cause damage, and historic and other buildings and structures need repairs. Funding requested under this program is used to meet such needs as well as unanticipated concessioner related requirements, such as providing necessary utilities and roads for approved concessioner expansion projects or conversely, to buyout a concessioner's possessory interest in a facility where such action is determined to be in the best interest of the Service. A detailed list of projects is given to Congress each year to describe how funds were used.

Unscheduled and Emergency Projects

Lump sum funding is the most effective method of correcting these conditions because such minor unscheduled construction needs can be met quickly without a lengthy review and appropriation process delay. The fiscal 1987 estimate of needs is based on prior fiscal years experience.

Fiscal 1987 Program

In order to contain the growth of the Federal deficit, the funding request for fiscal 1987 has been decreased to $2 million. This level, however, should be sufficient to cover the most urgent unanticipated repair/construction-related needs of the Service.

Justification of Program and Performance for Construction

Activity: Planning

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Estimate	Inc.(+) Dec.(-) from 1986
Advance Planning	$	5,368	5,137	2,800	-2,568
	(FTE-T)	(--)	(--)	(--)	(--)
Project Planning	$	10,317	9,873	4,996	-5,321
	(FTE-T)	(--)	(--)	(--)	(--)
Total Requirements:	$	15,685	15,010	7,796	-7,889
	(FTE-T)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Advance Planning	5,368	-231	5,137
Project Planning	10,317	-444	9,873
Planning Total	15,685	-675	15,010

Reductions required by P.L. 99-177 will mean that fewer future year project initial studies, evaluations, and preliminary planning efforts will be done through the Advance Planning Program. This will delay the availability of factual data for management decisions on future year construction requests. The reduction in project planning funding will mean that fewer final plans, construction drawings, and construction cost estimates will be completed to support post-1987 construction requests. However, funding should be sufficient to enable timely obligation of all currently appropriated funds for construction projects.

Authorization

16 U.S.C. 1

Objectives

To acquire archeological, historical, environmental, and engineering design information and prepare comprehensive design, working drawings, and specification documents needed to construct or rehabilitate facilities in National Park areas.

Activity Description:

Construction projects require the accomplishment of three sequentially dependent phases: advance planning, project planning and actual construction. This sequence spans a 3 to 5 year (or more) time period. The first phase, advance planning, includes special technical investigations, surveys, and comprehensive design. Also, utility contracts are negotiated; soils are tested; archeological research is carried out; and preliminary design plans are prepared. These advance planning activities: (1) Permit orderly scheduling of work; (2) provide data for management decisions on design alternatives; and (3) ensure early consideration of environmental review and compliance requirements. Without this planning information, project planning and construction of facilities would be virtually impossible.

Project planning is the second phase of the three-phase construction process. The work performed under this program includes preparation of architectural, landscape, engineering drawings and specifications. Project planning provides final estimates, construction drawings and contract bidding documents for all NPS construction projects. A listing of the tentative fiscal 1987 Project Planning Program has been provided. Projects marked with an asterisk denote projects eligible for Visitor Facilities Fund financing.

The Service attempts to schedule project planning at least 1 year before the construction project is scheduled. In the case of very large or complex construction projects, every attempt is made to schedule project planning 2 years in advance of proposed construction funding to assure that project funds will be obligated during the year of construction funding.

Fiscal 1987 Program

The funding requested for fiscal 1987 advance and project planning represents the Service's latest estimates for accomplishing the planning and design necessary to support the reduced funding level of this and future fiscal years construction request.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

1987 LINE ITEM CONSTRUCTION PROGRAM

Park	Pkg.	Title	Gross Amount (000's)
Bryce Canyon NP	174	Rehabilitate Bryce Canyon Lodge	1,800*
Chickasaw NRA	197	Rehabilitate Sewage System, Travertine District (Phase II)	870
Death Valley NM	324	Replace Motel Building, Concessioner Storage Building, and Employee Trailer Court	900*
Fort McHenry NM	149	Rehabilitate Historic Seawall	860
Grand Canyon NP	360	Reconstruct Water Distribution System, Village Area (Phase III)	4,181
Yellowstone NP	620	Rehabilitate Purchased Concessions Facilities	3,357*
Yosemite NP	473	Rehabilitate Electrical System (Phase II)	3,740
Yosemite NP	852	Construct Employee Housing, El Portal	3,610
		Total	19,318

*Denotes Visitor Facility Fund-eligible projects.

NATIONAL PARK SERVICE

FISCAL 1987 VISITOR FACILITIES FUND PROGRAM

PARK: Bryce Canyon National Park, Utah

REGION: Rocky Mountain

PROJECT TITLE: (174) Rehabilitate Bryce Canyon Lodge

DEVELOPMENT LIMITATION AMOUNT REMAINING: N/A

PROJECT DETAIL:

	($ Thousands)		
	Total BA Through FY 1986	FY 1987 Request	Future Estimate
Rehabilitate the Bryce Canyon Lodge	--	1,800	--
Total	--	1,800*	--

FY 1987 PROJECT SCHEDULE:

	QUARTER				
	1st	2nd	3rd	4th	FY 1988
Construction Start:				X	
Construction Completion:					X

PROJECT JUSTIFICATION:

Project Description: Work to include exterior rehabilitation, correct any structural, mechanical, electrical and any other code deficencies. Install a fire sprinkler system; rehabilitate the kitchen, lobby, restrooms, dining room, auditorium and gift shop; and develop second floor offices, restrooms, storage, and an employee dining room. The courtyard will be converted to pedestrian access from parking area, improving snow removal and reducing building deterioration caused by collected snow.

Need/Benefit: Completion of the above improvements will bring these concession facilities into minimum code compliance and eliminate very serious and unacceptable life and fire safety deficiencies. Additional exterior rehabilitation will replace deteriorated logs and structural elements as outlined in the Historic Structures Report. Expansion of dining and visitor service areas will allow the concessioner to meet the increased visitation needs and improve food service.

*Estimate based on architectural and engineering reports.

NATIONAL PARK SERVICE

FISCAL 1987 CONSTRUCTION PROGRAM

PARK: Chickasaw National Recreation Area, Oklahoma

REGION: Southwest

PROJECT TITLE: (197) Renovate Sewer System, Travertine District (Phase II)

DEVELOPMENT LIMITATION AMOUNT REMAINING: $2,500,000

PROJECT DETAIL:

	($ Thousands)		
	Total BA Through FY 1986	FY 1987 Request	Future Estimate
Replace or Reline 30,200 Feet of 4-Inch to 18-Inch Sewer Pipe	1,223	870	
Total	1,223	870*	

FY 1987 PROJECT SCHEDULE:

	QUARTER				
	1st	2nd	3rd	4th	FY 1988
Construction Start:	X				
Construction Completion:			X		

PROJECT JUSTIFICATION:

Project Description: Phase II completes the renovation of sewage collection system begining in fiscal 1986. Work in this phase involves the lateral collecting sewer lines of 4-inch, 6-inch, 8-inch and 12-inch size, approximately 19,600 feet total, with manholes.

Need/Benefit: Metered flow rates have indicated substantial water infiltration of the 75-year-old clay pipe sewage collection system. As a result, the sewers, which are laid on relatively flat slopes, overflow periodically, discharging raw sewage that degrades the water quality of Travertine and Rock Creeks and the Lake of the Arbuckles.

Originally, the Service had intended to "slipline" approximately 80 percent of the sewer lines and thereby complete this project in fiscal 1986. However, recent further inspection of the lines show much more extensive and severe deterioration than anticipated.

Funding made available in 1986 will only be sufficient to replace the main trunk sewer system, leaving the lateral collecting lines unrepaired.

*Estimate based upon advance planning underway.

NATIONAL PARK SERVICE

FISCAL 1987 VISITOR FACILITIES FUND PROGRAM

PARK: Death Valley National Monument

REGION: Western

PROJECT TITLE: (326) Replace Motel Building, Concessioner Storage Building,
and Employee Trailer Court

DEVELOPMENT LIMITATION AMOUNT REMAINING: N/A

PROJECT DETAIL:

	($ Thousands) Total Ap Through FY 1986	FY 1987 Request	Future Estimate
Construct 8-Unit Motel Building		479	
Construct Storage Building		219	
Construct Employee Trailer Court with Utilities	---	170	---
Total	---	868*	---

FY 1987 PROJECT SCHEDULE:

	QUARTER 1st	2nd	3rd	4th	FY 1988
Construction Start:	X				
Construction Completion:			X		

PROJECT JUSTIFICATION:

Project Description: Replace a motel building, a storage building, and an employee trailer court at Stovepipe Wells, a concessioner-operated lodging complex owned by the Government.

Need/Benefit: Construction of this project contains elements originally identified in the fiscal 1986 program, but which could not be completed within available funds. An eight-room motel building will be constructed to replace substandard units removed from service over past 3 years. The storage building replaces substandard sheds demolished 2 years ago and provides adequate protection for equipment now left outside. New trailer court will eliminate unsafe liquid propane gas system, deteriorated water lines, and replace inadequate electrical systems as well as improve aesthetics by relocating trailers to a more appropriate site.

*Based on plans prepared under fiscal 1986 Visitor Facilities Fund Program.

NATIONAL PARK SERVICE

[illegible]

PARK: [illegible]

REGION: [illegible]

PROJECT TITLE: [illegible]

DEVELOPMENT CONCEPT/PLAN APPROVED: [illegible]

PROJECT DETAIL: [illegible]

[illegible]

PROJECT JUSTIFICATION:

Project Description: [illegible]

Need/Benefit: [illegible]

[illegible]

NATIONAL PARK SERVICE

FISCAL 1987 CONSTRUCTION PROGRAM

PARK: Grand Canyon National Park,

REGION: Western

PROJECT TITLE: (361) Reconstruct Water Distribution System, Village Area (Phase III)

DEVELOPMENT LIMITATION AMOUNT REMAINING: N/A

PROJECT DETAIL:

	($ Thousands)		
	Total $s Through FY 1986	FY 1987 Request	Future Estimate
Water Storage Tank (1.5 million Gallons)		675	
Water Line from Tank to Pump Station (12")		385	
Remaining Desert View Water Line (8")		2,362	
Apache Street Improvements		618	
Pump Station Improvements		341	
Total	8,776	4,381*	

FY 1987 PROJECT SCHEDULE:

	QUARTER				
	1st	2nd	3rd	4th	FY 1988
Construction Start:			X		
Construction Completion:					X

PROJECT JUSTIFICATION:

Project Description: This is the third and final portion of the reconstruction of the water delivery system for the South Rim area of the park. This phase ties additional water storage and fire protection into the South Rim water system, extends the existing pipeline from Buggeln Hill to Desert View and completes water service improvements for Apache Street and the existing pumphouse.

Need/Benefit: Phase I and II of this project corrected problems with most of the 70-year-old water lines in the village area. Phase III will provide added emergency water storage and better fire protection by increasing flow rates. The extension of the South Rim's distribution line to Desert View will end the year-round daily hauling of water to this popular entry point to the park (an estimated 600,000 gallons). Replacement of water lines in the Apache Street area will correct problems with old leaking lines and correct a potential health danger by separating the water lines from the existing sewer lines.

*Estimate based on project planning underway.

NATIONAL PARK SERVICE

FISCAL 1987 CONSTRUCTION PROGRAM

PARK: Yellowstone National Park, Wyoming-Montana-Idaho

REGION: Rocky Mountain

PROJECT TITLE: (620) Rehabilitate Purchased Concessions Facilities

DEVELOPMENT LIMITATION AMOUNT REMAINING: N/A

PROJECT DETAIL:

	($ Thousands) Total BA Through FY 1986	FY 1987 Requests	Future Estimate
Interior and Exterior Rehabilitation, Lake Hotel		800	
Construct 35-Room Employee Dormitory, Lake Area		1,394	
Interior Rehabilitation, Old Faithful Inn		1,163	
Total	38,001	3,357*	5,700

FY 1987 PROJECT SCHEDULE:

	QUARTER 1st	2nd	3rd	4th	FY 1988
Construction Start:		X			
Construction Completion:					X

PROJECT JUSTIFICATION:

Project Description: This is the sixth phase of the Service's commitment to rehabilitate facilities purchased from the former concessioner by the Government in 1979. Work will include interior, exterior, and electrical repairs to the Lake Hotel; construction of an additional dormitory at Lake and interior rehabilitation at the Old Faithful Inn.

Need/Benefit: The generally deteriorated and unsafe condition of most of the 1,000 facilities (hotels, restaurants, dormitories, cabins, warehouses, utility systems, etc.) formerly owned by the Yellowstone Park Company was documented in the widely circulated 1976 355-page report "Yellowstone National Park Concessions Management Review of the Yellowstone Park Company." Rehabilitation of the acquired facilities began with $2 million in fiscal 1980 for initial life-safety corrections. This fiscal 1987 phase will almost complete the Government's commitment to rehabilitate these deteriorated visitor use facilities.

*Estimate based on advance and project planning underway.

NATIONAL PARK SERVICE

FISCAL 1987 CONSTRUCTION PROGRAM

PARK: Yosemite National Park, California

REGION: Western

PROJECT TITLE: (473) Rehabilitate Electrical System (Phase II)

DEVELOPMENT LIMITATION AMOUNT REMAINING: N/A

PROJECT DETAIL:	($ Thousands) Total BA Through FY 1986	FY 1987 Requests	Future Estimate
Valley Switching Station Building and Equipment		*2,298	
Duct Bank and Cables from Substation Number 1 to Valley Switching Station		1,442	
Construct Primary and Secondary Feeders in Yosemite Valley, Replace Cascades, Glacier Point and Wawona Feeders, Provide Standby Power Capability, Demolish Old Dam and Penstock, etc.			10,000
Total	6,869	3,740	10,000

FY 1984 PROJECT SCHEDULE:	QUARTER 1st	2nd	3rd	4th	FY 1988
Construction Start:			X		
Construction Completion:					X

PROJECT JUSTIFICATION:

Project Description: This work is the second phase of a multi-phase rehabilitation of the electrical system for Yosemite Valley, including Glacier Point, Wawona Tunnel, and Cascades. Phase II consists of the construction of a new Valley Switching Station, extension of duct bank and installation of conductors from substation number 1 to the new switching station.

Need/Benefit: The existing electrical distribution system for Yosemite Valley is overloaded and in need of extensive repair and/or improvements. Older portions of the system are in need of replacement to eliminate life safety hazards, unreliable operations, and violations of the National Electrical Safety Code (NESC), the National Electric Code (NEC), and Occupational Safety and Health Act (OSHA).

*Estimate based on completed preliminary drawings.

NATIONAL PARK SERVICE

FISCAL 1987 CONSTRUCTION PROGRAM

PARK: Yosemite National Park, California

REGION: Western

PROJECT TITLE: (852) Construct Employee Housing, El Portal

DEVELOPMENT LIMITATION AMOUNT REMAINING: N/A

PROJECT DETAIL:	Total BA Through FY 1986	($ Thousands) FY 1987 Requests	Future Estimate
Provide Thirty-four Dwelling Units Housed in Six Buildings with Partial Basement at Each Building for Mechanical Equipment and Storage.		2,985	
Site Development		448	
Utilities		92	
Parking		85	
Total		3,610*	

FY 1987 PROJECT SCHEDULE:	QUARTER 1st	 2nd	 3rd	 4th	FY 1988
Construction Start:		X			
Construction Completion:					X

PROJECT JUSTIFICATION:

Project Description: The subject project will be the first step toward accomplishing the long-range goal of moving employee housing and most administrative facilities out of the congested Yosemite Valley area. The mix of housing units consists of 17 efficiency apartments, 12 one-bedroom apartments, and 5 two-bedroom apartments together with roads, parking areas, utilities, landscaping, and furnishings.

Need/Benefit: Much of the year-round housing for employees of both the National Park Service and the Yosemite Park and Curry Company is seriously deficient. Some units are rated below accepted standards for housing of migrant workers established by the State of California. Some employees live in unheated tent cabins with canvas roofs during the winter months. Hazardous trees have forced the closing of Camp Six with its tent cabin housing following a fatality from a falling tree. With the closure of that housing area, the need for emplovee housing has become very acute. The current condition of housing has resulted in low morale and higher employee turnover. This proposed development will ameliorate current problems and will relieve congestion in Yosemite Valley.

*Estimate based on advance planning underway.

NATIONAL PARK SERVICE

FY 1987 CONSTRUCTION PROGRAM

Budget Authority
($ in thousands)

State	Project Description	Total Estimated Cost	Available Through FY 1986	FY 1987 Request
Arizona				
Grand Canyon National Park	Reconstruct Water Distribution System, Village Area (Phase III) (Package 360)	12,960	8,779	4,181
Subtotal, Arizona	....			4,181
California				
Death Valley National Monument	Construct Replacement Motel Building, Storage Building, and Employee Trailer Court (Package 324)	900	--	900*
Yosemite National Park	Rehabilitate Electrical System, Phase II (Package 473)	20,600	6,869	3,740
Yosemite National Park	El Portal Housing (Package 852)	3,610	--	3,610
Subtotal, California	....			8,250
Maryland				
Fort McHenry National Monument	Rehabilitate Historic Seawall (Package 149)	860	--	860
Subtotal, Maryland	....			860
Oklahoma				
Chickasaw National Recreation Area	Renovate Sewage System, Travertine District (Phase II) (Package 197)	2,093	1,223	870
Subtotal, Oklahoma	....			870
Utah				
Bryce Canyon National Park	Rehabilitate Bryce Canyon Lodge (Package 174)	1,800	--	1,800*
Subtotal, Utah	....			1,800
Wyoming				
Yellowstone National Park	Rehabilitate Purchased Concessions Facilities (Package 620)	43,660	38,001	3,357*
Subtotal, Wyoming	....			3,357
Total, Fiscal 1987 Line Item Construction Program	....			19,318

*Visitor Facilities Fund-eligible construction.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

PROPOSED FISCAL 1987 FEDERAL LANDS HIGHWAYS PROGRAM PROJECT LISTING

Park Area	Package Number	Project Title	Estimate ($000's)
Amistad National Recreation Area	180	Reconstruct Roads	250
Blue Ridge Parkway	132	Tunnel Linings, Phase II	1,980
Blue Ridge Parkway	343	Repave Section 25TU (North Carolina)	2,970
Denali National Park and Preserve	221	Roads and Parking, Visitor Access Center	1,450
Foothills Parkway	109	Construct Additional Parkway	7,500
Gateway National Recreation Area	150	Sandy Hook Roads and Bike Path	1,100
Grand Canyon National Park	110	Resurface South Entrance Road	3,630
Harpers Ferry National Historical Park	114	Visitor Access and Parking	3,300
Hot Springs National Park	143	Park Road Rehabilitation	1,100
Natchez Trace Parkway	300	Next Phase	5,500
National Capital Parks-Central	415	Lincoln Circle Approaches	4,400
North Cascades National Park	341	Replace Bridge Creek Bridge	375
Petrified Forest National Park	140	Puerco Bridge	2,310
Saratoga National Historical Park	152	Entrance Road and Bridges	550
Sequoia National Park	113	Roads and Parking, Concessioner Development, Grant Village	275
Sequoia National Park	840	Rehabilitate Park Roads, Phase I	2,200
Shenandoah National Park	125	Reconstruct Skyline Drive (Phase D)	2,630
Vanderbilt Mansion National Historic Site	130	Reconstruct Route 9 Bridge	1,650
Virgin Islands National Park	127	Reconstruct Lameshure Road	2,970
Voyageurs National Park	216	Construct Black Bay Entrance Road	1,430
Wupatki National Monument	103	Sunset Crater Roads	1,870

Park Area	Package Number	Project Title	Estimate ($000's)
Yellowstone National Park	254	Thumb-Old Faithful Road Rehabilitation, Phase I	5,500
Yosemite National Park	146	Rehabilitate Tioga Pass	550
Yosemite National Park	370	Replace Sentinel Bridge	440
Yosemite National Park	843	Rehabilitate Glacier Point Road	1,100
		Construction Project Total	57,030
		Additional Program Elements	
		FHWA Engineering, Bridge and Road Inspections	1,500
		FHWA Administrative Expenses	1,400
		NPS Administrative Engineering, Signs, and Special Studies	2,500
		Advance and Project Planning	12,570
		Grand Total	75,000

TENTATIVE PROGRAM:
INDIVIDUAL PROJECTS AND
COST ESTIMATES SUBJECT
TO CHANGE

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FISCAL 1987 PROJECT PLANNING

NPS-226

Park	Package Number	Developed Area	Title	Amount
Bandelier National Monument	214	Headquarters	Relocate Maintenance Area	40,000
			Park Total	40,000
Big Bend National Park	113	Chisos Basin	Construct Visitor Contact Station	40,000
			Park Total	40,000
Boston National Historical Park	132	Old State House	Stabilize Old State House	90,000
			Park Total	90,000
Bryce Canyon National Park	146*	Headquarters	Infrastructure for Concessioner Development	50,000
Bryce Canyon National Park	174*	Headquarters	Rehabilitate Bryce Canyon Lodge	110,000
			Park Total	160,000
Canaveral National Seashore	107	Park General	Construct Comfort Stations and Utilities, Apollo Beach	20,000
			Park Total	20,000

*Denotes Visitor Facilities Fund-eligible projects.

TENTATIVE PROGRAM:
INDIVIDUAL PROJECTS AND
COST ESTIMATES SUBJECT
TO CHANGE

Park	Package Number	Developed Area	Title	Amount
Cape Cod National Seashore	138	Park General	Relocate 3 Historic Light Stations	65,000
			Park Total	65,000
Cape Hatteras National Seashore	175	Park General	Construct Lighthouse Revetment	40,000
			Park Total	40,000
Cape Lookout National Seashore	125*	Park General	Replace 34 Guest Lodging Units	110,000
			Park Total	110,000
Catoctin Mountain Park	152	Park General	Water and Sewer System, West Side	150,000
			Park Total	150,000
Crater Lake National Park	220*	Park General	Construct Replacement Lodging Facility	450,000
			Park Total	450,000
Death Valley National Monument	324	Stove Pipe	Replacement Motel, Storage Building, and Trailer Court	90,000
			Park Total	90,000
Delaware Water Gap National Recreation Area	264	Park General	Rehabilitate Visitor Facilities	100,000
			Park Total	100,000
Denali National Park and Preserve	221	Headquarters	Construct Visitor Access/Information Facility	25,000
			Park Total	25,000
Eugene O'Neill National Historic Site	101	Park General	Connect Water and Sewer to Public Utilities	20,000
			Park Total	20,000

TENTATIVE PROGRAM:
INDIVIDUAL PROJECTS AND
COST ESTIMATES SUBJECT
TO CHANGE

NPS-228

Park	Package Number	Developed Area	Title	Amount
Fort McHenry National Historical Park	149	Park General	Rehabilitate Historic Seawall	30,000
			Park Total	30,000
Fort Smith National Historical Park	130	Park General	Construct Pedestrian Overpass	30,000
			Park Total	30,000
Gateway National Recreation Area	109	Park General	Rehabilitate Visitor Facilities, Roads and Parking	150,000
Gateway National Recreation Area	149*	Staten Island	Replace Great Kills Bathhouse	100,000
Gateway National Recreation Area	169	Jamaica Bay	Rehabilitate Electrical Systems, Fort Tilden and Floyd Bennett Field	195,000
			Park Total	445,000
George Washington Memorial Parkway	183	Glen Echo	Stabilize Historic Structure, Glen Echo	80,000
George Washington Memorial Parkway	474*	Daingerfield Island	Construct Infrastructure for Concessioner Development	60,000
			Park Total	140,000
Glen Canyon National Recreation Area	340*	Bullfrog Basin	Construct Concessions Support Facilities	75,000
			Park Total	75,000
Grand Canyon National Park	353	Indian Gardens	Indian Gardens Sewage System	180,000
			Park Total	180,000

TENTATIVE PROGRAM:
INDIVIDUAL PROJECTS AND
COST ESTIMATES SUBJECT
TO CHANGE

NPS-229

Park	Package Number	Developed Area	Title	Amount
Gulf Islands National Seashore	105	Perido Key	Reconstruct Day Use Facilities	75,000
			Park Total	75,000
Harpers Ferry National Historical Park	114	Cavalier Heights	Construct Visitor Contact Station and Staging Area	30,000
			Park Total	30,000
Lake Clark National Park and Preserve	100	Port Alsworth	Construct Employee Housing	60,000
			Park Total	60,000
Mount Rainier National Park	315*	Sunrise	Rehabilitate Sunrise Lodge	110,000
Mount Rainier National Park	370*	Headquarters	Rehabilitate Paradise Inn	100,000
			Park Total	210,000
National Capital Parks-Central	409*	The Mall	Finish National Sculpture Gardens	91,000
			Park Total	91,000
National Capital Parks-East	316*	Fort McNair	Rehabilitate NPS Marinas	80,000
			Park Total	80,000
North Cascades National Park	147	Fields Point	Construct Marina Facilities	20,000
			Park Total	20,000
Ozark National Scenic River	103	Akers Ferry	Construct Sewer System	120,000
			Park Total	120,000

TENTATIVE PROGRAM:
INDIVIDUAL PROJECTS AND
COST ESTIMATES SUBJECT
TO CHANGE

Park	Package Number	Developed Area	Title	Amount
Petrified Forest National Park	111	Park General	Reconstruct Water Treatment Plant	160,000
			Park Total	160,000
Redwoods National Park	149	Del Norte	Construct Unsafe Camping, Del Norte	130,000
			Park Total	130,000
Sequoia National Park	103*	Grant Grove	Infrastructure for Concessioner Development	90,000
Sequoia National Park	200*	Clover Creek	Construct Clover Creek Developed Area	300,000
			Park Total	390,000
Sleeping Bear Dunes National Lakeshore	180	Platte District	Rehabilitate Utilities, Comfort Stations, and Campsites	60,000
			Park Total	60,000
Springfield Armory National Historical Park	101	Park General	Rehabilitate Historic Structure	70,000
			Park Total	70,000
Upper Delaware Scenic and Recreational River	115	Park General	Site Restoration, Roebling Aqueduct	50,000
			Park Total	50,000
Voyageurs National Park	116*	Kettle Falls	Construct Replacement Lodging Units	200,000
			Park Total	200,000
Wolf Trap Farm Park	130	Park General	Construct Comfort Station	10,000
			Park Total	10,000

OPERATING PROGRAM:
INDIVIDUAL PROJECTS AND
COST ESTIMATES SUBJECT
TO CHANGE

Park	Package Number	Developed Area	Title	Amount
Wrangell-St. Elias National Park and Preserve	[illegible]	Park General	Construct Replace Housing, Chitina and Slana	[illegible]
			Park Total	[illegible]
Yellowstone National Park	[illegible]	Park General	Rehabilitate Purchased Concessioner Facilities	[illegible]
			Park Total	[illegible]
Yosemite National Park	[illegible]	Park General	Rehabilitate Park Electrical System	[illegible]
Yosemite National Park	[illegible]	El Portal	Relocate Yosemite Valley Facilities	[illegible]
			Park Total	[illegible]
			Grand Total	[illegible]

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Program and Financing (in thousands of dollars) (Continued)

Identification code 14-1039-0-1-303	1985 actual	1986 estimate	1987 estimate
Budget authority (continued):			
41.00 Transferred to other accounts.......	-9,500	--	--
42.00 Transferred from other accounts.....	--	8,500	8,500
43.00 Appropriation (adjusted)...........	101,545	113,436	29,114
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	104,086	113,436	51,000
72.40 Obligated balance, start of year....	65,580	85,778	93,214
74.40 Obligated balance, end of year......	-85,778	-93,214	-47,214
78.00 Adjustments in unexpired accounts...	-1,533	--	--
90.00 Outlays..............................	82,354	106,000	97,000

Status of Direct Loans (in thousands of dollars)

Position with respect to appropriations act limitation on obligations:			
1111 Limitation on direct loans to the public............................	--	1,500	--
1112 Unused balance of direct loan limitation........................	--	-1,500	--
Obligations exempt from limitations:			
1131 Direct loans to the public	--	9	--
1150 Total direct loan obligations........	--	9	--
Cumulative balance of direct loans outstanding:			
1210 Outstanding, start of year	7,991	7,991	8,000
1231 Disbursements: Direct loan disbursements......................	--	9	--
1290 Outstanding, end of year.............	7,991	8,000	8,000

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CONSTRUCTION

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-1039-0-1-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority..........................	101,545	113,436	29,114
Outlays:..................................	82,354	106,000	97,000
Reduction pursuant to P.L. 99-177:			
Budget authority..........................	--	-4,878	--
Outlays...................................	--	-1,120	-4,128
Rescission proposal:			
Budget authority..........................	--	-8,713	--
Outlays...................................	--	-1,703	-3,502
Total:			
Budget authority..........................	101,545	99,845	29,114
Outlays...................................	82,354	103,177	89,370

Object Classification (in thousands of dollars)

Identification code 14-1039-0-1-303		1985 actual	1986 estimate	1987 estimate
	NATIONAL PARK SERVICE			
	Direct obligations:			
	Personnel compensation:			
11.1	Full-time permanent.................	11,449	12,200	9,328
11.3	Other than full-time permanent......	1,631	1,743	1,332
11.5	Other personnel compensation........	550	581	444
11.8	Special personnel services payments........................	11	--	--
11.9	Total personnel compensation........	13,641	14,524	11,104
12.1	Personnel benefits: Civilian.......	1,884	1,786	1,366
21.0	Travel and transportation of persons...........................	1,808	1,909	1,818
22.0	Transportation of things............	162	171	131
23.3	Communications, utilities, and miscellaneous charges.............	315	333	255
24.0	Printing and reproduction...........	344	363	278
25.0	Other services......................	64,409	60,282	23,911
26.0	Supplies and materials..............	1,547	1,634	1,249
31.0	Equipment...........................	349	369	282
32.0	Lands and structures................	13,048	12,212	4,844
42.0	Insurance claims and indemnities....	15	16	12
99.0	Subtotal, direct obligations........	97,522	93,599	45,250

Object Classification (in thousands of dollars) (continued)

Identification code 14-1039-0-1-303		1985 actual	1986 estimate	1987 estimate
Reimbursable obligations:				
Personnel compensation:				
211.101	Full-time permanent...............	3,213	3,238	3,238
211.301	Other than full-time permanent....	1,469	1,479	1,479
211.501	Other personnel compensation......	542	548	548
211.801	Special personnel services payments........................	1	--	--
211.901	Total personnel compensation......	5,225	5,265	5,265
212.101	Personnel benefits: Civilian.....	673	647	647
221.001	Travel and transportation of persons.........................	481	481	481
222.001	Transportation of things..........	176	176	176
223.301	Communications, utilities, and miscellaneous charges...........	2,229	2,229	2,229
224.001	Printing and reproduction.........	105	105	105
225.001	Other services....................	8,228	10,953	6,953
226.001	Supplies and materials............	3,113	3,113	3,113
231.001	Equipment.........................	121	121	121
232.001	Lands and structures..............	907	907	907
242.001	Insurance claims and indemnities..	3	3	3
299.001	Subtotal, reimbursable obligations........	21,261	24,000	20,000

Object Classification (in thousands of dollars) (continued)

Identification code 14-1039-0-1-303		1985 actual	1986 estimate	1987 estimate
ALLOCATION ACCOUNTS				
Personnel compensation:				
11.1	Full-time permanent..................	805	763	196
11.3	Other than full time permanent.......	79	98	--
11.5	Other personnel compensation.........	--	35	--
11.9	Total personnel compensation.........	884	896	196
12.1	Personnel benefits: Civilian........	94	105	20
21.0	Travel and transportation of persons............................	122	147	22
22.0	Transportation of things.............	35	27	--
23.3	Communications, utilities, and miscellaneous charges..............	23	19	--
24.0	Printing and reproduction............	27	30	--
25.0	Other services.......................	1,296	1,004	--
26.0	Supplies and materials...............	30	40	--
31.0	Equipment............................	26	13	--
32.0	Lands and structures.................	3,945	17,556	5,512
41.0	Grants, subsidies and contributions..	81	--	--
42.0	Insurance claims and indemnities.....	1	--	--
99.0	Subtotal, obligations, allocations accounts............................	6,564	19,837	5,750
99.9	Total obligations....................	125,347	137,436	71,000

Object Classification (in thousands of dollars) (continued)

Identification code 14-1039-0-1-303	1985 actual	1986 estimate	1987 estimate
Obligations are distributed as follows:			
National Park Service	118,783	117,599	65,250
Department of Defense-Civil Corps of Engineers	2,566	13,162	5,750
Department of Transportation-Federal Highway Administration	3,998	6,675	--

Personnel Summary

Identification code 14-1039-0-1-303	1985 actual	1986 estimate	1987 estimate
NATIONAL PARK SERVICE			
Direct:			
Total number of full-time permanent positions	512	520	450
Total compensable workyears:			
Full-time equivalent employment	571	603	461
Full-time equivalent of overtime and holiday hours	4	4	4
Average GS grade	10.05	10.07	10.07
Average GS salary	23,890	24,086	24,086
Average salary of ungraded positions	24,312	23,096	23,096
Reimbursable:			
Total number of full-time permanent positions	25	25	25
Total compensable workyears:			
Full-time equivalent employment	205	205	205
Full-time equivalent of overtime and holiday hours	11	11	11
Average GS grade	10.30	10.30	10.30
Average GS salary	25,488	25,684	25,684
Average salary of ungraded positions	24,312	24,312	24,312
ALLOCATION ACCOUNTS			
Total number of full-time permanent positions	30	31	7

Personnel Summary (continued)

Identification code 14-1039-0-1-303	1985 actual	1986 estimate	1987 estimate
Total compensable workyears:			
Full-time equivalent employment..........	32	33	7
Full-time equivalent of overtime and holiday hours......................	--	1	--
Average GS grade...........................	9.24	9.25	10.40
Average GS salary..........................	25,570	25,703	27,200

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CONSTRUCTION

Program and Financing (in thousands of dollars)

Identification code 14-1039-6-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	--	-5,248	--
Financing:			
25.00 Reduction in new spending authority (offsetting collections)..........	--	370	--
40.00 Budget authority (appropriation)....	--	-4,878	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-5,248	--
72.40 Obligated balance, start of year....	--	--	-4,128
74.40 Obligated balance, end of year......	--	4,128	--
90.00 Outlays............................	--	-1,120	-4,128

Status of Direct Loans (in thousands of dollars)

Position with respect to appropriations act limitation on obligations:			
1111 Limitation on direct loans to the public..............................	--	-65	--
1112 Unused balance of direct loan limitation.........................	--	65	--
1150 Total direct loan obligations........	--	--	--

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CONSTRUCTION
(Rescission Proposal)

Program and Financing (in thousands of dollars)

Identification code 14-1039-5-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
00.01 Construction........................	--	-12,634	--
00.03 Planning...........................	--	-979	--
10.00 Obligations (object class 25)	--	-13,613	--
Financing:			
23.40 Unobligated balance rescission proposal.........................		4,900	--
40.01 Appropriation rescission proposal	--	-8,713	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net	--	-13,613	--
72.40 Obligated balance, start of year............................	--	--	-11,910
74.40 Obligated balance, end of year......	--	11,910	8,408
90.00 Outlays............................	--	-1,703	-3,502

Road Construction

Contract Authority. Contract authority for the Service's roads, trails and parkway construction program is provided in the Federal-Aid Highway Act. The current authorities are provided in section 104(a)(7) and 104(a)(8) of the Federal-Aid Highway Act of 1973 (Public Law 93-87) approved August 13, 1973. This bill provides advance contract authority for the Service's roads, trails, and parkways programs.

Programming of requirements for park trails is now included in the "Construction" appropriation discussed under separate heading elsewhere in the fiscal 1986 budget request. Major road and parkway projects are funded from the Highway Trust Fund under the provisions of the Surface Transportation Act of 1982 (Public Law 97-424).

The 1978 appropriation completed the liquidation of all prior year obligations in this account. Public Law 96-126 rescinded funds for projects which were deobligated during the fiscal year.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ROAD CONSTRUCTION

Program and Financing (in thousands of dollars)

Identification code 14-1037-0-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Roads, trails and parkways, Total obligations (object class 25.0)......................	--	13	--
Financing:			
17.00 Recovery of prior year obligations..	-1	--	--
21.40 Unobligated balance available, start of year.....................	-13	-13	--
24.40 Unobligated balance available, end of year.......................	13	--	--
39.00 Budget authority.....................	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	13	--
72.40 Obligated balance, start of year....	1,463	784	--
74.40 Obligated balance, end of year......	-784	--	--
78.00 Adjustments in unexpired accounts...	-1	--	--
90.00 Outlays.............................	679	797	--

Appropriation Summary Statement

Appropriation: John F. Kennedy Center for the Performing Arts

The National Park Service is responsible for the operations of the Kennedy Center--except those functions directly supporting the performing arts. In effect, the Service conducts those aspects of the operation resulting from the Center's designation as a monument to President John Kennedy, including maintenance, security, information, interpretation, and other similar services. The National Park Service currently shares the cost of these activities with the Kennedy Center Board of Trustees.

JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

For expenses necessary for operating and maintaining the nonperforming arts functions of the John F. Kennedy Center for the Performing Arts, [$4,800,000] $4,771,000. (20 U.S.C. 761 (e)); Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190: additional authorizing legislation to be proposed.)

Appropriation Language Citations

Appropriation: John F. Kennedy Center for the Performing Arts

Appropriation language and citations:

1. For expenses necessary for operating and maintaining the nonperforming arts functions of the John F. Kennedy Center for the Performing Arts.

Not authorized

P.L. 92-313 (86 Stat. 216) amends Sec. 10 Section 6 of the John F. Kennedy Center Act, as amended (72 Stat. 1968) by adding at the end thereof the following new subsection: (e) The Secretary of the Interior, acting through the National Park Service, shall provide maintenance, security, information, interpretation, janitorial and all other services necessary to the nonperforming arts functions of the John F. Kennedy Center for the Performing Arts.

P.L. 99-190 extended the appropriation authorization through the fiscal year ending September 30, 1986.

Legislation is required for the John F. Kennedy Center for the Performing Arts for fiscal 1987.

Summary of Requirements

Appropriation: John F. Kennedy Center for the Performing Arts

SUMMARY OF BASE ADJUSTMENTS	(Dollar amounts in thousands) FTE-T	Amount
1986 Appropriation	78	4,771
P.L. 99-177 Reduction	—	- 205
1986 Adjusted Appropriation	78	4,566
Adjustment for 1986 impact of P.L. 99-177	—	+ 205
1987 Base Budget	78	4,771

Comparison by activities/ subactivities	1985 Actual		1986 Appropriation Enacted to Date		P.L. 99-177 Reduction	FY 1986 Adjusted Approp.	Fiscal 1987 Base		Fiscal 1987 Estimate		Inc. or Dec.() from 1986 Appropriation		Inc. or Dec.() from 1986 Adjusted Approp.	Inc. or Dec.() From 1987 Base	
	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Amount	FTE-T	Amount
John F. Kennedy Center for the Performing Arts	78	4,529	78	4,771	-205	4,566	78	4,771	78	4,771	—	—	+205	—	—

NATIONAL PARK SERVICE

Justification of Adjustments to Base

(dollar amounts in thousands)

	FTE-T	Amount
Appropriation: John F. Kennedy Center for the Performing Arts		
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellations............	—	+205

The Balanced Budget and Deficit Control of Act of 1986 (P.L. 99-177) requires a 4.3 percent reduction in non-exempt programs. Since this reduction occurs only in fiscal 1986, this adjustment is made to allow a more comparable basis for showing program charges from fiscal 1986 to fiscal 1987.

Justification of Program and Performance

Activity: John F. Kennedy Center for the Performing Arts

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
John F. Kennedy Center for the Performing Arts	($)	4,771	4,566	4,771	4,771	—
	(FTE-T)	(78)	(78)	(78)	(78)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
John F. Kennedy Center for the Performing Arts	4,771	-205	4,566

The reductions mandated by P.L. 99-177 will require the deferral of maintenance projects and the purchase of supplies and materials. Vacant positions will be left unfilled for longer periods of time to reduce personnel service costs.

Authorization

Act of June 16, 1972 (86 Stat. 216)

Objectives

Preserve and protect the physical integrity of the John F. Kennedy Center for the Performing Arts.

Conduct visitor use and facility operation programs, including orientation, interpretation, maintenance, and security to ensure that visitors to the John F. Kennedy Center have a safe and enjoyable visit.

Base Program

The John F. Kennedy Center for the Performing Arts is a national cultural center for the performing arts and an official memorial to President John F. Kennedy. The Board of Trustees of the Kennedy Center has the responsibility for all performing arts activities. The National Park Service is responsible for building and grounds maintenance, security, information, interpretation, janitorial, and related support activities.

The Kennedy Center building complex occupies 23.2 acres and contains 1.5 million square feet of floor space; 122,400 square feet of marble floors, walks and terrace as well as numerous sprinkler systems and fountains; 23 elevators

John F. Kennedy Center for the Performing Arts

and 6 escalators; 1,000 feet of seawall with fence; 900 feet of benches; and 11 flower beds. The electrical, heating, air-conditioning, and plumbing systems are extensive and technically sophisticated. Large areas of the Center are carpeted. Visitation in fiscal 1985 was 3.1 million. These statistics provide some indication of the scope of maintenance and operating support required of the National Park Service at the Center.

Visitor services, including information, interpretation, and police security must be conducted year round with the peak for such services occurring during the May-September summer season. These services include crowd control assistance for free special events, audiovisual programs, special talks and assistance to visitors. The heavy visitor use of the Center also adds to the janitorial, maintenance and energy workload.

The functions carried out by the National Park Service at the Kennedy Center are security, building maintenance, housekeeping, grounds maintenance, information, and administration. The Service shares the cost of building maintenance, housekeeping, and administration with the Center's Board of Trustees on the basis of an agreed upon formula of 76.2 percent (National Park Service) and 23.8 percent (Board of Trustees).

Included in the fiscal 1987 base of $4,771,000 are such major annual recurring expenses as:

Item	Estimated FY 1987 Base
Personnel (including U.S. Park Police)............	$1,999
Housekeeping....................................	868
Elevator Contract................................	86
Trash Collection.................................	8
Electricity......................................	2,035
Pest Control.....................................	1
A/C Maintenance Contract.........................	24
Communications...................................	16
Tour Assistance and Memorial Security............	225
Supplies and Materials...........................	160
Miscellaneous contracts and other expenses........	479
Total..	5,901
Portion paid by the Kennedy Center Board(23.8%)	-1,130
Net National Park Service base......................	4,771

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

Program and Financing (in thousands of dollars)

Identification code 14-1038-0-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations....................	4,529	4,771	4,771
Financing:			
39.00 Budget authority....................	4,529	4,771	4,771
Budget authority:			
40.00 Appropriation......................	4,529	4,800	4,771
40.00 Reduction pursuant to P.L. 99-190...	--	-29	--
43.00 Appropriation (adjusted)...........	4,529	4,771	4,771
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	4,529	4,771	4,771
72.40 Obligated balance, start of year....	1,380	1,169	1,431
74.40 Obligated balance, end of year......	-1,169	-1,431	-1,431
77.00 Adjustments in expired accounts.....	-15	--	--
90.00 Outlays............................	4,725	4,509	4,771

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-1038-0-1-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority	4,529	4,771	4,771
Outlays	4,725	4,509	4,771
Reduction pursuant to P.L. 99-177:			
Budget authority	--	-205	--
Outlays	—	-149	-56
Total:			
Budget authority	4,529	4,566	4,771
Outlays	4,725	4,360	4,715

Object classification (in thousands of dollars)

Identification code 14-1038-0-1-303		1985 actual	1986 estimate	1987 estimate
	Personnel compensation:			
11.1	Full-time permanent	1,350	1,460	1,460
11.3	Other than full-time permanent	151	137	137
11.5	Other personnel compensation	80	94	94
11.9	Total personnel compensation	1,581	1,691	1,691
12.1	Personnel benefits: Civilian	288	275	275
21.0	Travel and transportation of persons	2	5	5
23.3	Communications, utilities and other rent	1,459	1,282	1,283
24.0	Printing and reproduction	—	5	5
25.0	Other services	1,058	1,388	1,384
26.0	Supplies and materials	130	120	118
31.0	Equipment	11	5	10
99.0	Total obligations	4,529	4,771	4,771

Personnel Summary

Identification code 14-1038-0-1-303	1985 actual	1986 estimate	1987 estimate
Total number of full-time permanent positions	70	70	70
Total compensable workyears:			
Full-time equivalent employment	72	78	78
Full-time equivalent of overtime and holiday hours	1	1	1
Average GS grade	6.03	6.43	6.49
Average GS salary	15,339	17,317	17,674
Average salary of ungraded positions	24,381	23,403	23,759

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS

Program and Financing (in thousands of dollars)

Identification code 14-1038-6-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	--	-205	--
Financing:			
40.00 Budget authority (appropriation)....	--	-205	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-205	--
72.40 Obligated balance, start of year....	--	--	-56
74.40 Obligated balance, end of year......	--	-56	--
90.00 Outlays............................	--	-149	-56

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

Appropriation Summary Statement

Appropriation: Urban Park and Recreation Fund

This appropriation was initiated in 1979 to provide matching grants to cities for the renovation of urban park and recreation facilities. Federal funding for this program has not been appropriated since fiscal 1984.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
URBAN PARK AND RECREATION FUND

Program and Financing (in thousands of dollars)

Identification code 14-1031-0-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations (object class 41.0)........................	99	2,943	--
Financing:			
21.40 Unobligated balance available, start of year......................	-3,042	-2,943	--
24.40 Unobligated balance available, end of year........................	2,943	--	--
39.00 Budget authority....................	--	--	--
Budget authority:			
40.00 Appropriation.......................	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	99	2,943	--
72.40 Obligated balance, start of year....	59,714	15,283	4,511
74.40 Obligated balance, end of year......	-15,283	-4,511	-711
77.00 Adjustments in expired accounts.....	-545	--	--
90.00 Outlays.............................	43,985	13,715	3,800

Appropriation Summary Statement

Appropriation: Land Acquisition

This appropriation finances the acquisition of certain lands for inclusion in the National Park System in order to preserve nationally important natural and historic resources. Funds are also provided to coordinate and administer this acquisition program.

The fiscal 1987 budget request is $15.27 million, including: $8.0 million for land acquisition; $5.0 million for related administrative expenses; and $2.27 million for administrative expenses for State grants awarded in previous fiscal years. The requested amount for acquisition provides funds for deficiency court awards, and for emergency and hardship acquisitions. No funds are requested for grants-in-aid to States.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Land Acquisition [and State Assistance]

For expenses necessary to carry out the provisions of the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 4601-4-11), including administrative expenses, and for acquisition of land or waters, or interest therein, in accordance with statutory authority applicable to the National Park Service, [$98,400,000] $15,270,000, to be derived from the Land and Water Conservation Fund, to remain available until expended[of which $50,000,000 is for the State Assistance program including $1,650,000 to administer the program: Provided, That State administrative expenses associated with the State grant portion of the State Assistance program shall not exceed 15 percent; Provided further, That none of the State Assistance funds may be used as a contingency fund]: Provided [further], That of the amounts previously appropriated to the Secretary's contingency fund for grants to States, [$852,000] $893,000 shall be available in [1986] 1987 for administrative expenses of the State grant program. (Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Appropriation Language Citations

National Park Service

Appropriation: Land Acquisition

1. For expenses necessary to carry out the provisions of the Land and Water Conservation Fund Act of 1965, as amended (16 U.S.C. 460 1-4-11),

16 U.S.C. 460 1-5 and 6

16 U.S.C. 460 1-5, "During the period ending September 30, 1989, there shall be covered into the land and water conservation fund in the Treasury of the United States, the following revenues and collections . . . ."

16 U.S.C. 460 1-6, "Moneys covered into the fund shall be available for expenditure for the purposes of this part only when appropriated therefor."

2. including administrative expenses,

16 U.S.C. 460 1-4-11

16 U.S.C. 460 1-4-11, Authority to appropriate Fund moneys for administrative expenses is considered to be implied in the law and recognized by Congress in appropriation language and appropriation committee reports designating specific amounts for administrative expenses.

3. and for acquisition of land or waters, or interest therein, in accordance with statutory authority applicable to the National Park Service, $______,

16 U.S.C. 460 1-9(a)

16 U.S.C. 460 1-9(a) "Moneys appropriated from the Fund for Federal purposes shall, unless otherwise allotted in the appropriation Act making them available, be allotted by the President to the following purposes and subpurposes: (1) For the acquisition of land, waters, or interests in land or waters as follows: National Park System . . . ."

4. to be derived from the Land and Water Conservation Fund,

16 U.S.C. 460 1-5 and 6

16 U.S.C. 460 1-5, "During the period ending September 30, 1989, there shall be covered into the land and water conservation fund in the Treasury of the United States, ..."

5. to remain available until expended:

16 U.S.C. 460 1-6

16 U.S.C. 460 1-6, "Moneys covered into the fund shall be available for expenditure . . . only when appropriated . . . Such appropriations may be made without fiscal year limitation."

6. Provided, That of the amounts previously appropriated to the Secretary's contingency fund for grants to States, $ shall be available in 19___ for administrative expenses of the State grant program.

16 U.S.C. 1-4-11

Authority to make previous appropriations available for administrative expenses is considered to be implied in the law as is the authority to appropriate new funds for the same purpose, as explained in part 2 above.

Justification of Proposed Language Changes

Land Acquisition

1. Deletion: "and State Assistance" in the appropriation head.

   This language is no longer necessary since no funds are requested for the State Assistance Program in fiscal 1987.

2. Deletion: ", of which $50,000,000 is for the State Assistance Program including $1,650,000 to administer the program:"

   This language is not necessary because funds are not requested in 1987 for the State Assistance Program.

3. Deletion: "Provided, That State administrative expenses associated with the State grant portion of the State Assistance program shall not exceed 15 percent: Provided further, That none of the State Assistance funds may be used as a contingency fund"

   This language is not necessary because funds are not requested in 1987 for the State Assistance Program.

NATIONAL PARK SERVICE

Budgetary Resources

Account: Land Acquisition (14X5035)

FY 1986 Budgetary Status

Budget authority available:		
Appropriation realized		97,810,000
Deferral from FY 1985		3,356,000
Other prior-year unobligated balance brought forward		136,285,000
Total BA available		237,451,000
Less proposed rescissions:		
1. Land acquisition	-19,306,000	
2. State grants	-35,901,000	
Total proposed rescissions	-55,207,000	
Less anticipated obligations (by activity):		
1. Land acquisition	-121,811,000	
2. Land acquisition administration	-6,255,000	
3. State grants	-49,576,000	
4. State grant administration	-3,602,000	
Total anticipated obligations		-181,244,000
Less Gramm-Rudman-Hollings reduction		-5,496,000
Total net obligations		175,748,000

FY 1987 Request

Anticipated unobligated balance brought forward (deferral)		1,000,000
Plus increases proposed (by activity):		
1. Land acquisition	+8,000,000	
2. Land acquisition administration	+5,000,000	
3. State grants	--	
4. State grant administration	+2,270,000	
Total increase proposed		+15,270,000
Total anticipated BA available for obligation		16,270,000

NATIONAL PARK SERVICE

Analysis of Budgetary Resources by Activity1/

Account: Land Acquisition (14X5035)

Activity	FY 1985 Appropriation	FY 1986 Appropriation	FY 1987 Appropriation	FY 1987 Inc.(+)/Dec.(-) from FY 1986 Appropriation
1. Land Acquisition				
BA available for obligation:				
Appropriation - Regular........	88,797,000	43,140,000	8,000,000	-35,140,000
Unoblig. bal. brt. fwd.........	56,168,000	97,977,000	--	-97,977,000
Transferred from BLM...........	30,000,000	--	--	--
Recovery of PY obligations.....	35,000	--	--	--
Proposed rescission...........	--	-19,306,000	--	+19,306,000
Total BA available...........	175,000,000	121,811,000	8,000,000	-113,811,000
Less obligations................	-77,023,000	-121,811,000	-8,000,000	+113,811,000
Unoblig. balance brt. fwd........	97,977,000	--	--	--
(FTE-T)....	(3)	(--)	(--)	(--)
2. Land Acquisition Administration				
BA available for obligations:				
Appropriation..................	6,885,000	4,970,000	5,000,000	+30,000
Unoblig. bal. brt. fwd.........	1,782,000	2,285,000	1,000,000	-1,285,000
Total BA available...........	8,667,000	7,255,000	6,000,000	-1,255,000
Less obligations, net of recov...	-6,382,000	-6,255,000	-6,000,000	+255,000
Unoblig. balance brt. fwd........	2,285,000	1,000,000	--	-1,000,000
(FTE-T)....	(181)	(167)	(157)	(-10)
3. State Grants				
BA available for obligation:				
Appropriation..................	71,853,000	48,060,000	--	-48,060,000
Unoblig. bal. brt. fwd.........	31,720,000	38,269,000	--	-38,269,000
Transferred to Admin...........	-318,000	--	--	--
Recovery of PY obligations.....	31,579,000	--	--	--
Deferral to Admin..............	--	-852,000	--	+852,000
Proposed rescission............	--	-35,901,000	--	+35,901,000
Total BA available...........	134,834,000	49,576,000	--	-49,576,000
Less obligations.................	-96,565,000	-49,576,000	--	+49,576,000
Unoblig. balance brt. fwd........	38,269,000	--	--	--
(FTE-T)....	(--)	(--)	(--)	--)
4. State Grant Administration				
BA available for obligation:				
Appropriation..................	1,629,000	1,640,000	2,270,000	+630,000
Unoblig. bal. brt. fwd.........	2,849,000	1,110,000	--	-1,110,000
Transferred from grants........	318,000	852,000	--	-852,000
Recovery of PY obligations.....	4,000	--	--	--
Secretary's contingency fund...	--	--	893,000	+893,000
Total BA available...........	4,800,000	3,602,000	3,163,000	439,000
Less obligations, net recov......	-3,690,000	-3,602,000	-3,163,000	-439,000
Unoblig. balance brt. fwd........	1,110,000	--	--	--
(FTE-T)....	(40)	(40)	(40)	(--)

1/This table does not reflect the Gramm-Rudman-Hollings reduction of $5,496,000.

NATIONAL PARK SERVICE

Analysis of Budgetary Resources by Activity (Continued)

Account: Land Acquisition (14X5035)

Activity	FY 1985 Appropriation	FY 1986 Estimate	FY 1987 Estimate	FY 1987 Inc.(+)/Dec.(-) from FY 1986 Estimate
Account Total				
BA available for obligation:				
Appropriation....................	169,164,000	97,810,000	15,270,000	-82,540,000
Unoblig. bal. brt. fwd...........	92,519,000	139,641,000	1,000,000	-138,641,000
Transfer.........................	30,000,000	--	--	--
Recovery of PY obligations.......	31,618,000	--	--	--
Proposed rescissions.............	--	-55,207,000	--	+55,207,000
Secretary's contingency fund....	--	--	893,000	+893,000
Total BA available...........	323,301,000	182,244,000	17,163,000	-165,081,000
Less obligations.................	-183,660,000	-181,244,000	-17,163,000	+164,081,000
Unoblig. balance brt. fwd........	139,641,000	1,000,000	--	-1,000,000
(FTE-T)....	(224)	(207)	(197)	(-10)

Justification of Program and Performance

Activity: Land Acquisition

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
NPS Land Acquisition	($)	43,140	41,285	--	8,000	+8,000
Acquisition Management	($)	4,970 1/	4,756	--	5,000 2/	+5,000
	(FTE-T)	(167)	(167)	(167)	(157)	(-10)
Total Requirements	($)	48,110	46,041	--	+13,000	+13,000
	(FTE-T)	(167)	(167)	(167)	(157)	(-10)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Land Acquisition	48,110	-2,069	46,041

The reduction of $2,069,000 mandated by P.L. 99-177 will contribute to delays in completing ongoing acquisitions. Travel will be curtailed, key positions will be left vacant, and the number of contract appraisals will be cut back. Reductions in the amounts appropriated for individual parks will result in the acquisition of fewer tracts.

Authorization

16 U.S.C. 4601-4-11, et seq.

Objectives

To acquire land and interests in land to preserve and protect, for public use and enjoyment, the historic, scenic, natural and recreational values of congressionally authorized areas within the National Park System.

1/ Supplemented by $1.9 million deferred from fiscal 1985.

2/ The proposed budget will be supplemented by $1 million to be deferred from fiscal 1986 from amounts available for acquisition management.

Land Acquisition

Base Program

Land acquisition funds are used for the acquisition of land and interests in land in areas of national significance. Such acquisition provides for public recreation opportunities as well as preserving the nation's natural and cultural resources. This program helps meet the increasingly heavy visitor demand for Federal recreation areas, preserves outstanding resources for public recreational use before they are converted to incompatible uses, and conserves the nation's natural and historic heritage.

A summary of the Service's fiscal 1987 land acquisition budget is shown below:

Acquisition Management..............................	$5,000,000
Emergencies, Hardships, Deficiencies and Relocation (All areas)............................	8,000,000

In order to help reduce Federal spending, the Administration is requesting a relatively modest level of acquisition funds. The request for $8 million is for the acquisition of emergency and hardship tracts and for payment of deficiencies and relocation claims on tracts previously filed in court or acquired. The fiscal 1987 request also includes $5 million for acquisition management. This latter amount, plus $1 million to be deferred from fiscal 1986, will support staff levels necessary to accomplish the cost-effective alternatives identified in the Land Protection Plans as well as the acquisition of emergency and hardship tracts and payments of deficiencies and relocation claims.

Land Protection Plans identify a variety of innovative techniques that provide sufficient protection of the resources at considerable savings of appropriated funds. These alternatives include exchanges, donations, cooperative agreements, and the purchase of scenic easements. It is expected that by the beginning of fiscal 1987, all 180 required Land Protection Plans will have been completed.

Justification of Program and Performance

Activity: State Grants Administration

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Assistance to States - Administrative	($)	1,640[1/]	1,569	--	2,270	+2,270
Expenses	(FTE-T)	(40)	(40)	(40)	(40)	(--)

1/ The total fiscal 1986 administrative amount is $3,602,200, including $1,640,000 appropriated for 1986 and $1,962,200 excess administrative funds and contingency account reversions deferred from fiscal 1985 and estimated to be obligated in fiscal 1986.

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
State Grants Administration	1,640	-71	1,569

As a result of the $71,000 P.L. 99-177 reduction, fiscal accountability and compliance responsibilities will be effected by an increased processing time required for new grants, amendments, grantee reimbursements and closeouts. Mandated compliance inspection will be reduced.

Authorization

16 U.S.C 4601-4-11 Land and Water Conservation Fund Act of 1965, as amended

Objectives

To administer previously awarded grants and any new grants in a responsible and accountable way, provide technical guidance and oversight to State grant activities to ensure that all grant and planning requirements are met and that active projects are completed in a timely manner. Through the Land and Water Conservation Fund (L&WCF) matching grant program, public understanding of the role and function of the National Park Service is increased, as well as expanding citizen involvement in the planning and preserving of recreation resources at the local and State level.

Base Program

Although the Administration has proposed a moratorium on funding for State grants since fiscal 1982, Congress approved funding of $72.9 million in State assistance grants in fiscal 1984, $71.9 million in fiscal 1985 and $48.06

State Grants Administration

million in fiscal 1986. With no new grant funding in fiscal 1987, administrative costs will decrease, but resources will still be needed to manage the unexpended balance from prior year appropriations as well as continuing compliance responsibilities on all projects. This will include administration of 5,000 active projects as well as monitoring of the more than 29,000 completed Land and Water Conservation Fund (L&WCF) projects.

Fiscal accountability and compliance responsibilities for L&WCF grants are defined by OMB Circulars A-87, A-102 A-128, and the L&WCF Act of 1965, as amended. Estimated requirements in 1986 are: process 500 new grant awards; process 3,000 letter of credit drawdowns and 450 billings against an estimated end-of-fiscal 1985, unexpended grant balance of $215 million; close-out 2,000 projects; inspect 1,700 grant sites; review and approve 500 grant amendments; conduct 25 State administrative program evaluations and review 26 State audit reports; review 75 conversion requests; evaluate and compile 55 State annual reports, and complete 2 mandated national evaluation reports.

Increase for 1987	1987 Base	1987 Estimate	Increase
$	--	2,270	+2,270
(FTE-T)	(40)	(40)	(40)

The Service is requesting a total new budget authority of $2.27 million for fiscal 1987. A total of $893,000 in recoveries of prior year grants will be available for reprogramming from the Secretary's contingency grant fund to supplement this amount. The total request of $3.16 million represents a decrease in budget authority from the $3.6 available in fiscal 1986 from all sources. This decrease reflects a declining workload as prior year grants are expended.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LAND AND WATER CONSERVATION FUND

Amounts Available for Appropriation (in thousands of dollars)

	1985 actual	1986 estimate	1987 estimate
Regular account: Unappropriated balance, start of year....................	3,006,634	3,584,022	4,382,780
Offsetting receipts: Land and Water Conservation Fund Act:			
Recreation fees...........................	30,898	31,645	32,275
Proposed legislation..................	--	--	-31,100*
Surplus property sales....................	220,296	120,214	93,011
Motorboat fuels tax.......................	1,000	1,000	1,000
Outer Continental Shelf Leases...........	647,806	747,141	773,714
Proposed legislation..................	--	--	31,100
Total available for appropriation....................	3,906,634	4,484,022	5,282,780
Appropriation:			
Bureau of Land Management, land acquisition..............................	-2,695	-2,286	--
Reduction pursuant to P.L. 99-177.........	--	98	--
Fish and Wildlife Service, land acquisition..............................	-70,218	-40,426	-1,500
Reduction pursuant to P.L. 99-177.........	--	1,738	--
Proposed rescission.......................	--	4,951	--
National Park Service, land acquisition...	-199,164	-97,810	-15,270
Reduction pursuant to P.L. 99-177.........	--	4,206	--
Proposed rescission.......................	--	55,207	--
Forest Service (Department of Agriculture), land acquisition, recreation............................	-50,535	-28,130	-55,206
Reduction pursuant to P.L. 99-177.........	--	1,210	--
Total appropriations....................	-322,612	-101,242	-71,976
Unappropriated balance, end of year.........	3,584,022	4,382,780	5,210,804

* The administration is proposing legislation authorizing increasing fees at a variety of recreation sites and the establishment of fees at a number of areas where no fees are currently charged. These revenues would be available for use by the collecting bureaus rather than being deposited in the Land and Water Conservation Fund.

Amounts Available for Appropriation (in thousands of dollars) (continued)

	1985 actual	1986 estimate	1987 estimate
Special account (Public Law 95-42, section 1): Unappropriated balance, start of year	142,621	142,621	142,621
Total available for appropriation	142,621	142,621	142,621
Appropriation	--	--	--
Unappropriated balance, end of year	142,621	142,621	142,621

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LAND ACQUISITION

Program and Financing (in thousands of dollars)

Identification code 14-5035-0-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
1. Land acquisition	77,023	141,117	8,000
2. Land acquisition administration	6,302	6,235	6,000
3. State grants	96,645	84,604	—
4. State grants administration	3,690	3,602	3,363
10.00 Total obligations	183,660	235,558	17,363
Financing:			
17.00 Recovery of prior year obligations	-31,618	—	—
21.40 Unobligated balance available, start of year	-82,519	-139,641	-1,993
24.40 Unobligated balance available, end of year	139,641	1,993	—
25.00 Unobligated balance lapsing	—	30,000	30,000
39.00 Budget authority	209,164	127,910	45,370
Budget authority:			
Current:			
40.00 Appropriation (special fund)	179,164	98,400	15,370
40.00 Reduction pursuant to Public Law 99-190	—	-490	—
42.00 Transferred from other accounts	30,000	—	—
43.00 Appropriation (adjusted)	209,164	97,910	15,370
Permanent:			
69.1001 Contract authority (permanent) (substantive law) (16 U.S.C 4601-10a)	—	30,000	30,000

Program and Financing (in thousands of dollars) (continued)

Identification code 14-5035-0-2-303		1985 actual	1986 estimate	1987 estimate
	Relation of obligations to outlays:			
71.00	Obligations incurred, net............	183,660	235,558	17,163
72.40	Obligated balance, start of year....	322,055	221,277	268,440
74.40	Obligated balance, end of year......	-221,277	-268,440	-151,948
77.00	Adjustments in expired accounts.....	-1,038	—	—
78.00	Adjustments in unexpired accounts...	-31,618	—	—
90.00	Outlays............................	251,783	188,395	133,655

Status of Unfunded Contract Authority (in thousands of dollars)

Unfunded balance, start of year............	—	—	—
Contract authority.........................	30,000	30,000	30,000
Unfunded balance rescinded.................	-30,000	—	—
Unfunded balance rescission proposal.......	—	-30,000	—
Proposed for later transmittal.............	—	—	-30,000
Unfunded balance, end of year..............	—	—	—

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LAND ACQUISITION

Summary of Budget Authority and Outlays
(in thousands of dollars)

Identification code 14-5035-0-2-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority..........................	199,164	127,810	45,270
Outlays..................................	251,783	188,395	133,655
Rescission proposal:			
Budget authority..........................	--	-83,917	--
Outlays..................................	--	-13,379	-11,041
Reduction pursuant to Public Law 99-177:			
Budget authority..........................	--	-5,496	--
Outlays..................................	--	-1,474	-2,732
Total:			
Budget authority..........................	199,164	38,397	15,270
Outlays..................................	251,783	173,542	119,882

Object Classification (in thousands of dollars)

Identification code 14-5035-0-2-303		1985 actual	1986 estimate	1987 estimate
NATIONAL PARK SERVICE				
	Personnel compensation:			
11.1	Full-time Permanent..................	8,976	7,790	7,413
11.3	Other than full-time permanent.......	525	459	437
11.5	Other personnel compensation.........	94	83	79
11.8	Special personal services payments...	30	17	16
11.9	Total personnel compensation.........	9,625	8,349	7,945
12.1	Personnel benefits: Civilian........	1,248	1,027	977
13.0	Benefits for former personnel........	6	6	6
21.0	Travel and transportation of persons.........................	578	470	447
22.0	Transportation of things.............	151	35	37
23.3	Communications, utilities and miscellaneous charges..............	530	319	328
24.0	Printing and reproduction............	47	48	50
25.0	Other services.......................	4,336	2,145	713
26.0	Supplies and materials...............	271	279	290
31.0	Equipment............................	286	170	177
32.0	Lands and structures.................	61,450	135,830	5,799
41.0	Grants, subsidies, and contributions......................	101,439	86,486	—
42.0	Insurance claims.....................	2,046	40	40
99.0	Subtotal, direct obligations.........	182,013	235,204	16,809

Object Classification (in thousands of dollars) (continued)

Identification code 14-5035-0-2-303	1985 actual	1986 estimate	1987 estimate
ALLOCATION ACCOUNTS			
Personnel compensation:			
11.1 Full-time permanent	155	103	103
12.1 Personnel benefits: Civilian	15	13	13
21.0 Travel and transportation of persons	3	8	8
22.0 Transportation of things	1	--	--
23.1 Standard level user charges	8	12	12
23.3 Communications, utilities, and miscellaneous charges	13	--	--
24.0 Printing and reproduction	1	4	4
25.0 Other services	277	73	73
26.0 Supplies and materials	4	2	2
32.0 Lands and structures	1,170	--	--
99.0 Subtotal, obligations, allocation accounts	1,647	354	354
99.9 Total obligations	183,660	235,558	17,163
Obligations are distributed as follows:			
National Park Service	182,013	235,204	16,809
Department of Defense-Civil: Corps of Engineers	1,566	354	354
Department of Justice	81	--	--

Personnel Summary

Identification code 14-5035-0-2-303	1985 actual	1986 estimate	1987 estimate
NATIONAL PARK SERVICE			
Total number of full-time permanent positions	214	197	187
Total compensable workyears:			
Full-time equivalent employment	224	207	197
Average GS grade	12.40	12.40	12.40
Average GS salary	40,071	40,332	40,332
ALLOCATION ACCOUNTS			
Total number of full-time permanent positions	6	4	4
Total compensable workyears:			
Full-time equivalent employment	6	4	4
Average GS grade	10.30	10.40	10.40
Average GS salary	25,800	26,400	27,200

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LAND ACQUISITION

Program and Financing (in thousands of dollars)

Identification code 14-5035-6-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	--	-5,496	--
Financing:			
40.00 Budget authority (appropriation)....	--	-4,206	--
69.10 Contract authority (permanent)......	--	-1,290	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-5,496	--
72.40 Obligated balance, start of year....	--	--	-3,572
74.40 Obligated balance, end of year......	--	3,572	--
90.00 Outlays............................	--	-1,924	-3,572

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LAND ACQUISITION (Rescission proposal)

Program and Financing (in thousands of dollars)

Identification code 14-5035-5-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
00.0101 Land acquisition..................	--	-19,306	--
00.0301 State grants......................	--	-35,901	--
10.0001 Total obligations.................	--	-55,207	--
Financing:			
32.4901 Balance of contract authority withdrawn......................	--	-28,710	--
40.0001 Budget authority (appropriation rescission proposal R86 ____)...	--	-55,207	--
49.0001 Contract authority (permanent) (special fund) (proposed legislation)....................	--	-28,710	--
Relation of obligations to outlays:			
71.0001 Obligations incurred, net.........	--	-55,207	--
72.4001 Obligated balance, start of year...........................	--	--	-41,828
74.4001 Obligated balance end, of year....	--	41,828	30,787
90.0001 Outlays...........................	--	-13,379	-11,041

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
LAND ACQUISITION (Rescission proposal)

Object Classification (in thousands of dollars)

Identification code 14-5035-5-2-303	1985 actual	1986 estimate	1987 estimate
132.001 Lands and structures..............	--	-19,306	--
141.001 Grants subsidies, and contributions...................	--	-35,901	--
999.901 Total obligations.................	--	-55,207	--

Appropriation Summary Statement

Appropriation: Planning, Development and Operation of Recreation Facilities

Prior to fiscal 1981, revenues from entrance and user fees in the National Park System and from other sources were deposited to the Land and Water Conservation Fund for future appropriations to support fee collection operations, visitor transportation systems operations, and other internal park activities. Congress halted deposits to and appropriations from this account in fiscal 1981 and directed that fee collection, visitor transportation and other operations be supported by the "Operation of the National Park System" appropriation.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
PLANNING, DEVELOPMENT AND OPERATION OF RECREATION FACILITIES

Amounts Available for Appropriation (in thousands of dollars)

Identification code 14-5006-0-2-303	1985 actual	1986 estimate	1987 estimate
Unappropriated balance, start of year......	15,158	15,158	15,158
Total available for appropriation........	15,158	15,158	15,158
Unappropriated balance, end of year........	15,158	15,158	15,158

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
PLANNING, DEVELOPMENT AND OPERATION OF RECREATION FACILITIES

Program and Financing (in thousands of dollars)

Identification code 14-5006-0-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations (object class 25.0)	35	20	--
Financing:			
21.40 Unobligated balance available, start of year	-56	-20	--
24.40 Unobligated balance available, end of year	20	--	--
39.00 Budget authority	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net	35	20	--
72.40 Obligated balance, start of year	175	71	--
74.40 Obligated balance, end of year	-71	--	--
78.00 Adjustments in unexpired accounts	--	--	--
90.00 Outlays	140	91	--

Appropriation Summary Statement

Appropriation: Visitor Facilities Fund

The Visitor Facilities Fund serves as a repository for concessioner franchise fees. Appropriations from the fund are used to repair and rehabilitate National Park Service-owned facilities that serve the visiting public.

Congress transfered $8.5 million from the Visitor Facilities Fund to the "Construction" Appropriation in fiscal 1986. The Service is proposing to transfer the same amount to the "Construction" Appropriation for fiscal 1987. Visitor Facility Fund amounts are, therefore, included within the "Construction" appropriation.

Justification of Program and Performance

Activity: National Park System Visitor Facilities Fund

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Estimate
Visitor Facilities Fund	($)	[8,448]*	[8,086]*	[8,500]
	(FTE-T)	(--)	(--)	(--)

*Transferred to the "Construction" appropriation for fiscal 1986.

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Visitor Facilities Fund	8,448	-362	8,086

As a result of P.L. 99-177 reductions, each of the eight Visitor Facilities Fund projects will be reduced by 4.3 percent. Depending upon the favorability of the low bids eventually received for these projects, sufficient contingency funds may exist to award the planned scopes of work without difficulty. If unfavorable low bids are received, the planned scopes of work may be reduced or a reprogramming of one or more projects to cover shortfalls on other projects may be required.

Authorization

Public Law 97-433 National Park System Visitor Facilities Fund Act

Objective

To upgrade, repair, rehabilitate, or otherwise improve visitor facilities owned by the National Park Service for the safety and enjoyment of park visitors.

Base Program

Public Law 97-433, passed on January 8, 1983, established the National Park System Visitor Facility Fund (VFF). Under this unique legislation, national park concessioner franchise and building use fees are to be used to fund the Visitor Facility Fund Program. Amounts credited to the VFF are authorized to be appropriated pursuant to the act. Work to be accomplished under the provisions of the act includes the reconstruction, rehabilitation, replacement, improvement, relocation, or removal of concession operated visitor facilities located in the National Park System in which the concessioner has no possessory interest. Current authorities expire September 30, 1989.

National Park System Visitor Facilities Fund

To date, eight Visitor Facilities Fund construction/rehabilitation projects have either been completed or are actively under construction. Final planning on eight fiscal 1986 projects is currently proceeding with awards for most of these projects scheduled before the end of the current fiscal year.

Fiscal 1987 Program

Language in P.L. 99-190 transferred program execution and funding for the fiscal 1986 Visitor Facilities Fund (VFF) Program to the Service's "Construction" appropriation. Subsequent to that action, the National Park Foundation has determined that their involvement in the VFF Program will terminate upon completion of all work underway on the fiscal 1984 and 1985 VFF Programs.

For fiscal 1987, the National Park Service proposes to again transfer $5.5 million from the VFF to the Service's "Construction" appropriation. Funds derived from the VFF will be used to finance three fiscal 1987 line item construction projects as well as advance and project planning for fiscal 1987 and future year construction projects which meet the criteria established for the VFF Program.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
VISITOR FACILITIES FUND

Amounts Available for Appropriation (in thousands of dollars)

Identification code 14-5078-0-2-303	1985 actual	1986 estimate	1987 estimate
Unappropriated balance, start of year.......	7,410	9,330	9,330
Collections (offsetting receipts)...........	7,800	8,500	9,000
Total available for appropriation...........	15,210	17,830	18,330
Appropriation:			
Visitor Facilities Fund....................	-5,880	-8,500	-8,500
Unappropriated balance, end of year.........	9,330	9,330	9,830

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
VISITOR FACILITIES FUND

Program and Financing (in thousands of dollars)

Identification code 14-5078-0-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Visitor facilities (Total obligations) (object class 25.00).....	7,341	3,695	--
Financing:			
21.40 Unobligated balance available, start of year......................	-5,156	-3,695	--
24.40 Unobligated balance available, end of year..........................	3,695	--	--
39.00 Budget authority....................	5,880	--	--
40.00 Budget authority (appropriation) (indefinite, special fund)........	5,880	8,500	8,500
41.00 Transferred to other accounts.......	--	-8,500	-8,500
43.00 Appropriation (adjusted)............	5,880	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	7,341	3,695	--
72.40 Obligated balance, start of year....	4	852	--
74.40 Obligated balance, end of year......	-852	--	--
90.00 Outlays.............................	6,494	4,547	--

Appropriation Summary Statement

Appropriation: Historic Preservation Fund

This appropriation finances 50 percent matching grants to the States and to the National Trust for Historic Preservation for historic preservation planning, projects and activities; 70 percent (Federal share) grants for the survey and inventory of historic properties; and direct grants for special purposes.

No funds are requested in fiscal 1987 for this appropriation.

[HISTORIC PRESERVATION FUND]

[For expenses necessary in carrying out the provisions of the Historic Preservation Act of 1966 (80 Stat. 915), as amended (16 U.S.C. 470), $24,945,000 to be derived from the Historic Preservation Fund, established by section 108 of that Act, as amended, to remain available for obligation until September 30, 1987.]

(Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 98-190.)

Justification of Proposed Language Changes

1. Deletion: "For expenses necessary in carrying out the provisions of the Historic Preservation Act of 1966 (80 Stat. 915), as amended (16 U.S.C. 470), $24,945,000 to be derived from the Historic Preservation Fund, established by section 108 of the act, as amended, to remain available for obligation until September 30, 1987."

   Since no funds are requested in fiscal 1987 for this appropriation, this language is no longer necessary.

Justification of Program and Performance

Activity: Historic Preservation Fund

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) From Base
Grants-in-Aid	($)	20,411	19,533	20,411	--	-20,411
	(FTE-T)	(--)	(--)	(--)	(--)	(--)
Grants-in-Aid to the National Trust	($)	4,384	4,196	4,384	—	-4,384
	(FTE-T)	(--)	(--)	(--)	(--)	(--)
Total Requirements	($)	24,795	23,729	24,795	--	-24,795
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Historic Preservation Fund	24,795	-1,066	23,729

As a result of the reduction of $878,000 required by P.L. 99-177 for Historic Preservation Fund grants-in-aid, an across-the-board decrease will be made to each grant awardee after the allocation formula has been calculated based on the total amount appropriated. For the National Trust, a total of $188,000 will be deducted from the total 1986 appropriation.

Authorization

16 U.S.C. 470	National Historic Preservation Act of 1966, as amended

Grants-in-Aid to States

Objectives

To provide matching grants to States for activities specified in the National Historic Preservation Act of 1966, as amended.

Base Program

Matching grants stimulate State and local government participation in: (1) identifying, evaluating, documenting, and nominating properties to the Service for inclusion in the National Register of Historic Places, which is the Nation's listing of districts, sites, buildings, structures, and objects significant in history, architecture, archeology, engineering, and culture at the national, State, and local levels; (2) protecting the historic properties by such means as preservation planning, technical assistance, and advocacy involving State and local planning and development agencies; (3) assisting Federal agencies that fund or license projects affecting State and local historic resources in accordance with sections 106 and 110 of the act and other Federal laws; (4) conducting first-line review of private sector rehabilitation projects for Federal tax incentives by working directly with architects and developers so that historic preservation construction work will comply with the Secretary of the Interior's standards; such negotiation work significantly reduces review time and effort needed for National Park Service determinations and certifications.

Matching grants directly finance State staff salaries and other costs necessary to accomplish program purposes. States carry out their responsibilities directly and through subgrants and contracts with public and private organizations, educational institutions, and individuals. At least 10 percent of each year's appropriation must be awarded as subgrants to local governments certified eligible under program regulations pursuant to section 101(c) of the act. Grant special conditions require emphasis on areas of known development in order to minimize project delays.

Grants-in-Aid to the National Trust for Historic Preservation

Objectives

To provide matching grants in support of public participation in historic preservation through educational and financial assistance programs of the National Trust.

Base Program

As a private nonprofit corporation chartered by Congress, the National Trust promotes private preservation efforts and leads the private sector preservation community through delivery of educational programs, publications and conferences, demonstration programs, grants and loans, advocacy activities, and ownership and operation of historic properties for public benefit. Through its Charter, the National Trust is empowered to accept donations of sites, buildings, and objects significant in American history and culture. It also administers, through management agreements, other important properties.

During fiscal 1986, the Trust continued programs including administration of the National Main Street Center, the Inner Cities Ventures Fund, technical and financial assistance to local communities, and programs and projects that promote preservation of the Nation's maritime heritage.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
($)	24,795	--	-24,795
(FTE-T)	(--)	(--)	(--)

No funds are requested for this appropriation in fiscal 1987. The Administration proposes to eliminate all direct Federal support for the preservation of historic properties except for those properties which are part of the National Park System. This proposal is based on the conclusion that direct Federal support can and should be replaced by private sector involvement or assistance from State and local governments. In addition, the Economic Recovery Tax Act of 1981 incorporates specific provisions which enhance tax incentives for the rehabilitation of income-producing historic buildings. From fiscal 1982 through fiscal 1985, over 10,300 projects have qualified for preservation tax incentives representing a private investment of $7.6 billion. We believe that these incentives will be sufficient to provide for the preservation and protection of historic properties without Federal support for State programs.

Distribution of decrease by object class

	Amount
Grants, subsidies and contributions	-$24,795,000

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HISTORIC PRESERVATION FUND

Amounts Available for Appropriation (in thousands of dollars)

Identification code 14-5140-0-2-303	1985 actual	1986 estimate	1987 estimate
Unappropriated balance, start of year	687,116	811,640	956,434
Offsetting receipts:			
Historic Preservation Act of 1966, as amended:			
Outer Continental Shelf Lands Act	150,000	150,000	150,000
Total available for appropriation	837,116	961,640	1,106,434
Appropriation	-25,480	-24,945	--
Reduction pursuant to Public Law 99-190	--	+150	--
Reduction pursuant to Public Law 99-177	--	+1,066	--
Amounts proposed for rescission	--	+18,523	--
Unobligated balance returned to unappropriated offsetting receipts	4	--	--
Unappropriated balance, end of year	811,640	956,434	1,106,434

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HISTORIC PRESERVATION FUND

Program and Financing (in thousands of dollars)

Identification code 14-5140-0-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
1. Grants-in-aid	21,070	20,411	--
2. National Trust for Historic Preservation	4,410	4,384	--
10.00 Total obligations (object class 41.0)	25,480	24,795	--
Financing:			
17.00 Recovery of prior year obligations	-4	--	--
21.40 Unobligated balance lapsing	4	--	--
39.00 Budget authority	25,480	24,795	--
Budget authority:			
40.00 Appropriation (special fund)	25,480	24,945	--
40.00 Reduction pursuant to Public Law 99-190	--	-150	--
43.00 Appropriation (adjusted)	25,480	24,795	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net	25,480	24,795	--
72.40 Obligated balance, start of year	21,835	17,867	17,620
74.40 Obligated balance, end of year	-17,867	-17,620	-7,859
77.00 Adjustments in expired accounts	-816	--	--
78.00 Adjustments in unexpired accounts	-4	--	--
90.00 Outlays	28, 628	25,042	9,761

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HISTORIC PRESERVATION FUND

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-5140-0-2-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority	25,480	24,795	--
Outlays	28,628	25,042	9,761
Reduction pursuant to P.L. 99-177:			
Budget authority	--	-1,066	--
Outlays	--	-330	-736
Rescission proposal:			
Budget authority	--	-18,523	--
Outlays	--	-6,668	-4,821
Total:			
Budget authority	25,480	5,206	--
Outlays	28,628	18,044	4,204

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HISTORIC PRESERVATION FUND

Program and Financing (in thousands of dollars)

Identification code 14-5140-6-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations	--	-1,066	--
Financing:			
40.00 Budget authority (appropriation)	--	-1,066	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net	--	-1,066	--
72.40 Obligated balance, start of year	--	—	-736
74.40 Obligated balance, end of year	--	736	--
90.00 Outlays	--	-330	-736

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
HISTORIC PRESERVATION FUND
(Rescission Proposal)

Program and Financing (in thousands of dollars)

Identification code 14-5140-5-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
00.0101 Grants-in-aid......................	--	-15,208	--
00.0201 National Trust for Historic Preservation......................	--	-3,315	--
10.0001 Total obligations..................	--	-18,523	--
Financing:			
40.0001 Budget authority (appropriation rescission proposal Public Law 99-177)...............	--	-18,523	--
Relation of obligations to outlays:			
71.0001 Obligations incurred, net..........	--	-18,523	--
72.4001 Obligated balance, start of year..	--	--	-11,855
74.001 Obligated balance, end of year.....	--	11,855	6,298
90.0001 Outlays..........................	--	-6,668	-5,557

ARBA

Appropriation Summary Statement

Appropriation: Commemorative Activities Fund

Public Law 93-179 provided that the American Revolution Bicentennial Administration terminate operations no later than June 30, 1977. Executive Order Number 12001 transferred certain of the functions performed by the American Revolution Bicentennial Administration together with the remaining unobligated balances to the National Park Service. This account received those transferred [illegible] and provides for continuing commemoration by the National Park Service of the events of the American Revolution.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
COMMEMORATIVE ACTIVITIES FUND

Program and Financing (in thousands of dollars)

Identification code 14-5077-0-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations	--	--	--
Financing:			
21.40 Unobligated balance available, start of year	-1	-1	--
24.40 Unobligated balance available, end of year	1	--	--
25.00 Unobligated balance lapsing	--	1	--
39.00 Budget authority	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net	--	--	--
72.40 Obligated balance, start of year	34	8	--
74.40 Obligated balance, end of year	-8	--	--
90.00 Outlays	26	8	--

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

ADMINISTRATIVE PROVISIONS

Appropriations for the National Park Service shall be available for the purchase of not to exceed [1 aircraft and 286] 400 passenger motor vehicles, of which [242] 348 shall be for replacement only, including not to exceed [174] 300 for police-type use and [6] 20 buses; to provide, notwithstanding any other provision of law, at a cost not exceeding $100,000, transportation for children in nearby communities to and from any unit of the National Park System used in connection with organized recreation and interpretive programs of the National Park Service; options for the purchase of land at not to exceed $1 for each option; and for the procurement and delivery of medical services within the jurisdiction of units of the National Park System: Provided, That any funds available to the National Park Service may be used, with the approval of the Secretary, to maintain law and order in emergency and other unforeseen law enforcement situations and conduct emergency search and rescue operations in the National Park System: Provided further, That none of the funds appropriated to the National Park Service may be used to process any grant or contract documents which do not include the text of 18 U.S.C. 1913: Provided further, That none of the funds appropriated to the National Park Service may be used to add industrial facilities to the list of National Historic Landmarks without the consent of the owner: Provided further, That the National Park Service may use helicopters and motorized equipment at Death Valley National Monument for removal of feral burros and horses [:Provided further, That the loan ceiling established under section 4(b) of Public Law 97-310, the Wolf Trap Farm Park Act, as amended, is increased to $9,500,000. Notwithstanding the loan repayment provisions of Public Law 97-310, the dollar amount of items paid for by the Wolf Trap Foundation from funds provided by the additional loan authority in this section that is subsequently reimbursed to the Foundation by a court award or insurance settlement shall be repaid to the Secretary of the Interior by the Wolf Trap Foundation within 90 days of the date of the court award or insurance settlement]. (Department of the Interior and Related Agencies Appropriations Act, 1986), as included in Public Law 99-190.)

Appropriation Language Citations

National Park Service

Appropriation: Administrative Provisions

1. Appropriations for the National Park Service shall be available for the purchase of not to exceed ________ passenger motor vehicles, of which ____ shall be for replacement only, including not to exceed ____ for police-type use and ____ buses;

31 U.S.C. 638(a)

31 U.S.C. 638(a) provides that "Unless specifically authorized by the appropriation concerned or other law, no appropriation shall be expended to purchase or hire passenger motor vehicles for any branch of the Government. . . ."

2. to provide, notwithstanding any other provision of law, at a cost not exceeding $_____, transportation for children in nearby communities to and from any unit of the National Park System used in connection with organized recreation and interpretive programs of the National Park Service;

No specific authority

This provision was adopted as a result of discussions at the fiscal year 1970 House hearings. National Park Service Director Hartzog pointed out that Wolf Trap and other suburban parks like Prince William Forest Park were ideal areas for children of the City of Washington to enjoy, but that there were no means to transport the children to these nearby parks. This situation is still prevalent, therefore the provision has been retained.

3. options for the purchase of land at not to exceed $1 for each option;

No specific authority

This provision was inserted by the Congress in the administrative provisions of the fiscal 1981 appropriation act. Congress felt that the National Park Service practice of obligating earnest money for limited purchase options on lands for which acquisition funding had not been appropriated was prejudging Congressional appropriation decisions and had the effect of influencing these decisions.

4. and for the procurement and delivery of medical services within the jurisdiction of units of the National Park System:

No specific authority

This provision was inserted by the Congress in the administrative provisions of the fiscal year 1984 appropriation act to enable park units to obtain medical services as required.

5. Provided, That any funds available to the National Park Service may be used, with the approval of the Secretary, to maintain law and order in emergency and other unforeseen law enforcement situations

No specific authority

This provision resulted from the year 1971 being the worst year in the history of the National Park Service with regard to disorders and other law enforcement encounters. This provision is essential to ensure the continuance of law and order in park areas, considering the unpredictability of the extent of funding needs from year-to-year.

6. and conduct emergency search and rescue operations in the National Park System:

No specific authority

This provision was requested in the fiscal 1982 budget because of the increased costs associated with search and rescue operations. The potential for increased costs further increases with the addition of new parks in Alaska.

7. Provided further, That none of the funds appropriated to the National Park Service may be used to process any grant or contract documents which do not include the text of 18 U.S.C. 1913:

18 U.S.C. 1913

18 U.S.C. 1913 provides that "No part of the money appropriated by any enactment of Congress shall . . . be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, to favor or oppose, by vote or otherwise, any legislation or appropriation by Congress, whether before or after the introduction of any bill or resolution proposing such legislation or appropriation . . . ."

8. Provided further, That none of the funds appropriated to the National Park Service may be used to add industrial facilities to the list of National Historic Landmarks without the consent of the owner:

No specific authority

This provision was added by the Congress in the fiscal year 1979 appropriation act to prohibit the National Park Service from adding industrial facilities to National Historic Landmark status without the owner's consent.

9. Provided, further, That the National Park Service may use helicopters and motorized equipment at Death Valley National Monument for removal of feral burros and horses.

No specific authority

This provision would allow the National Park Service to conduct removal activities that are otherwise prohibited by 16 U.S.C. 1331-1340 and 18 U.S.C. 47.

Justification of Proposed Language Changes

Administrative Provisions

1. Deletion: "1 aircraft and"

   No aircraft is scheduled for purchase in fiscal 1987. Therefore, this language is not necessary.

2. Deletion: ": Provided further, That the loan ceiling established under section 4(b) of Public Law 97-310, the Wolf Trap Farm Park Act, as amended, is increased to $9,500,000. Notwithstanding the loan repayment provisions of Public Law 97-310, the dollar amount of items paid for by the Wolf Trap Foundation from Funds provided by the additional loan authority in this section that is subsequently reimbursed to the Foundation by a court award or insurance settlement shall be repaid to the Secretary of the Interior by the Wolf Trap Foundation within 90 days of the date of the court award or insurance settlement"

   The above language is no longer needed to accomplish its purpose.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Allocations Received from Other Accounts

Note--Obligations incurred under allocations from other accounts are included in the schedules of the parent appropriations as follows:

Department of Agriculture, Forest Service:
"Forest Protection and Utilization"

Department of Commerce:
"Regional Development Program"
"Regional Action Planning Commission"

Department of Transportation:
Federal-Aid Highways
"Trust Fund"

Department of Navy:
"Military Construction"

Appalachia Regional Commission:
"Appalachia Regional Development Program"

Bureau of Reclamation:
"Construction and Rehabilitation"

Department of Army:
"Construction, General, Corps of Engineers, Civil"

Department of State:
"Salaries and Expenses, Special Foreign Currency Program"

Summary of Requirements

Appropriation: Miscellaneous Permanent Appropriations

SUMMARY OF BASE ADJUSTMENTS	(Dollar amounts in thousands) FTE-T	Amount
1986 Appropriation	14	1,271
P.L. 99-177 Reduction	—	1/
1986 Adjusted Appropriation	14	1,271
1987 Base Budget	14	1,271

Comparison by activities/ subactivities	1985 Actual		1986 Appropriation Enacted to Date		P.L. 99-177 Reduction	FY 1986 Adjusted Approp.	Fiscal 1987 Base		Fiscal 1987 Estimate		Inc. or Dec.() from 1986 Appropriation		Inc. or Dec.() from 1986 Adjusted Approp.	Inc. or Dec.() From 1987 Base	
	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Amount	FTE-T	Amount
Miscellaneous Permanent Appropriations	14	1,020	14	1,271	1/	1,271	14	1,271	14	1,271	—	—	—	—	—

1/ P.L. 99-177 requires a limitation on obligations for this account of $1,276,000 in fiscal 1986.

Justification of Program and Performance

Activity: Miscellaneous Permanent Appropriations

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Educational Expenses, Yellowstone National Park Employees' Children	($)	555	--	555	555	--
	(FTE)	(2)	(--)	(2)	(2)	(--)
Payment for Tax Losses on Land acquired for Grand Teton National Park	($)	30	--	30	30	--
Operation, management, maintenance and demolition of federally acquired properties, Independence National Historical Park	($)	5	--	5	5	--
Delaware Water Gap National Recreation Area--Operating expenses for Route 209	($)	681	--	681	681	--
	(FTE)	(12)	(--)	(12)	(12)	(--)
Total Requirements	($)	1,271	1,271 1/	1,271	1,271	--
	(FTE)	(14)	(--)	(14)	(14)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Miscellaneous Permanent Appropriations	1,271	1/	1,271

1/ P.L. 99-177 establishes an obligation limitation of $1,216,000 for fiscal 1986.

These permanent accounts earmark revenues from entrance and special user fees in three parks for specific purposes. The reductions mandated by P.L. 99-177 will result in a decrease in support to the public school at Yellowstone

National Park, a lower offsetting payment to the State of Wyoming for taxes lost through the acquisition of parkland, and a cut in amounts available to operate and maintain U.S. Route 209 through Delaware Water Gap National Recreation Area.

Educational Expenses, Yellowstone National Park Employees' Children

Authorization

16 U.S.C. 40a Act of June 4, 1948

Objectives

Pay the additional costs of educating children of employees stationed at Yellowstone National Park, Wyoming-Montana-Idaho.

Base Program

The Service is authorized to use visitor fees collected at Yellowstone National Park to defray the additional costs of educating children at this remote location. The funds are used to augment teachers' salaries, to buy school equipment and supplies, to offset students' transportation costs, and to maintain park school facilities.

Payment of Tax Losses on Land Acquired for Grand Teton National Park

Authorization

P.L. 81-787 (64 Stat. 849)

Objectives

To compensate the State of Wyoming for taxes lost as a result of acquisition of land at Grand Teton National Park.

Base Program

Fee revenues collected at Grand Teton and Yellowstone National Parks are used in part to compensate Wyoming for tax revenues lost because of an expansion of Grand Teton National Park. Amounts vary because of changes in the tax rate, withdrawal of additional lands from the tax rolls, and the gradual reduction of the amount due.

Operation, Management, Maintenance and Demolition of Federally Acquired Properties; Independence National Historical Park

Authorization

65 Stat. 644

Objectives

To utilize receipts from rental and parking operations for the operation, management or maintenance of federally acquired properties.

Miscellaneous Permanent Appropriations

Base Program

Revenues received from the rental of office space and parking lot fees are used at Independence National Historical Park to manage, operate, maintain, and in some instances, to demolish and replace real property acquired through purchase or donation for the park.

Operating Expenses for Route 209, Delaware Water Gap National Recreation Area

Authorization

97 Stat. 329

Objectives

To manage and maintain that section of U.S. Route 209 that falls within the boundaries of Delaware Water Gap National Recreation Area.

Base Program

Language included in the fiscal 1983 supplemental appropriations act closed U.S. Route 209, within the boundaries of Delaware Water Gap National Recreation Area, to all commercial vehicular traffic, except for those vehicles belonging to businesses based within the recreation area or which have business facilities in Monroe and Pike Counties, Pennsylvania. The act further authorized the Secretary of the Interior to establish fees for the use of the roadway by such commercial vehicles. Revenues received are set aside in a special account for the management, operation, and maintenance of Route 209 within the boundaries of the recreation area.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS

Program and Financing (in thousands of dollars)

Identification code 14-9924-0-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
00.01 Educational expenses, children of employees, Yellowstone National Park	471	555	555
00.02 Payment for tax losses on land acquired for Grand Teton National Park	28	30	30
00.03 Operation, management, maintenance, and demolition of federally acquired properties, Independence National Historical Park	--	5	5
00.04 Delaware Water Gap, Route 209 operations	555	779	681
10.00 Total obligations	1,055	1,369	1,271
Financing:			
17.00 Recovery of prior year obligations	-2	--	--
21.40 Unobligated balance available, start of year	-1,012	-986	-888
24.40 Unobligated balance available, end of year	986	888	888
60.00 Budget authority (appropriation) (permanent, indefinite, special fund)	1,028	1,271	1,271
Relation of obligations to outlays:			
71.00 Obligations incurred, net	1,055	1,369	1,271
72.40 Obligated balance, start of year	189	127	127

Program and Financing (in thousands of dollars) (continued)

Identification code 14-9924-0-2-303	1985 actual	1986 estimate	1987 estimate
Relation of obligations to outlays:			
74.40 Obligated balance, end of year......	-137	-137	-137
78.00 Adjustments in unexpired accounts...	-5	—	—
90.00 Outlays..............................	1,118	1,269	1,271
Distribution of budget authority by account:			
Educational expenses, children of employees, Yellowstone National Park................................	563	550	550
Payment for tax losses on land acquired for Grand Teton National Park................................	55	30	30
Operation, management, maintenance, and demolition of federally acquired properties, Independence National Historical Park..........................	1	5	5
Delaware Water Gap, Route 209 Operations................................	625	685	686
Distribution of outlays by account:			
Educational expenses, children of employees, Yellowstone National Park................................	485	550	550
Payment for tax losses on land acquired for Grand Teton National Park...........	28	30	30
Operation, management, maintenance, and demolition of federally acquired properties, Independence National Historical Park..........................	18	5	5
Delaware Water Gap, Route 209 Operations................................	587	776	686

[illegible]

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]			
Budget authority	[illegible]	[illegible]	[illegible]
Outlays	[illegible]	[illegible]	[illegible]
Reduction pursuant to P.L. 99-177:			
Budget authority	[illegible]	[illegible]	[illegible]
Outlays	[illegible]	[illegible]	[illegible]
Total:			
Budget authority	[illegible]	[illegible]	[illegible]
Outlays	[illegible]	[illegible]	[illegible]

Object Classification (in thousands of dollars)

Identification code 14-[illegible]	1985 actual	1986 estimate	1987 estimate
Personnel compensation:			
11.1 Full-time permanent	173	173	173
11.3 Other than full-time permanent	54	54	54
11.5 Other personnel compensation	1	1	1
11.8 Total personnel compensation	228	228	228
12.1 Personnel benefits: Civilian	23	23	23
23.3 Communications, utilities, and miscellaneous charges	3	3	3
25.0 Other services	634	873	777
26.0 Supplies and materials	237	210	210
31.0 Equipment	108	—	—
41.0 Grants, subsidies and contributions	28	30	30
42.0 Insurance claims and indemnities	1	—	—
99.0 Total obligations	1,262	1,368	1,271

Personnel Summary

Total number of full-time permanent positions	7	7	7
Total compensable workyears:			
Full-time equivalent employment	14	14	14
Average GS grade	5.30	5.30	5.33
Average GS salary	16,286	16,286	16,286
Average salary of ungraded positions	24,312	23,096	23,096

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
MISCELLANEOUS PERMANENT APPROPRIATIONS

Program and Financing (in thousands of dollars)

Identification code 14-9924-6-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations....................	--	-55	--
Financing:			
21.40 Unobligated balance available, start of year......................	--	--	-55
24.40 Unobligated balance available, end of year.......................	--	55	55
39.00 Budget authority......................	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-55	--
72.40 Obligated balance, start of year....	--	--	-28
74.40 Obligated balance, end of year......	--	28	--
90.00 Outlays.............................	--	-27	-28

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

Appropriation Summary Statement

Appropriation: Construction (Trust Fund)

Public Law 93-87 authorized the relocation of U.S. Route 25E from its existing location through the Cumberland Gap National Historical Park to another alignment involving a 4,100-foot tunnel. Congress appropriated $10,300,000 in fiscal 1986 to liquidate available contract authority for this project. No appropriations are requested for fiscal 1987. Given the current status of the work funded in previous years, it is unlikely that additional tunnel construction could be awarded and underway before fiscal 1988.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CONSTRUCTION (TRUST FUND)

Program and Financing (in thousands of dollars)

Identification code 14-8215-0-7-401	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	32,576	12,095	100
Financing:			
17.00 Recovery of prior year obligations..	-4,541	--	--
Unobligated balance available, start of year:			
21.40 Appropriation......................	-2,131	-2,095	-300
21.49 Contract authority.................	-45,000	-17,000	-6,700
Unobligated balance, end of year:			
24.40 Appropriation......................	2,095	300	200
24.49 Contract authority.................	17,000	6,700	6,700
39.00 Budget authority...................	--	--	--
Budget authority:			
40.00 Appropriation......................	28,000	10,300	--
40.49 Portion applied to liquidate contract authority...............	-28,000	-10,300	--
43.00 Appropriation (adjusted)...........	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net..........	32,576	12,095	100
72.40 Obligated balance, start of year....	13,347	37,794	30,589
74.40 Obligated balance, end of year......	-37,794	-30,589	-16,089
78.00 Adjustments in unexpired accounts...	-4,541	--	--
90.00 Outlays............................	3,588	19,300	14,600

Status of Unfunded Contract Authority (in thousands of dollars)

Identification code 14-8215-0-7-401	1985 actual	1986 estimate	1987 estimate
Unfunded balance, start of year............	45,000	17,000	6,700
Appropriation to liquidate contract authority...............................	-28,000	-10,300	—
Unfunded balance, end of year..............	17,000	6,700	6,700

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CONSTRUCTION (TRUST FUND)

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-8215-0-7-401	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority........................	--	--	--
Outlays................................	3,588	19,300	14,600
Reduction pursuant to P.L. 99-177:			
Budget authority........................	--	--	--
Outlays................................	--	-82	-361
Total:			
Budget authority........................	--	--	--
Outlays................................	3,588	19,218	14,239

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CONSTRUCTION (TRUST FUND)

Object Classification (in thousands of dollars)

Identification code 14-8215-0-7-401	1985 actual	1986 estimate	1987 estimate
NATIONAL PARK SERVICE			
11.1 Personnel compensation: Full-time permanent	11	11	11
12.1 Personnel benefits: Civilian	1	1	1
21.0 Travel and transportation of persons	4	4	4
25.0 Other services	35	35	84
32.0 Lands and structures	84	2,044	--
99.0 Subtotal, obligations, National Park Services	135	2,095	100
ALLOCATION TO FEDERAL HIGHWAY ADMINISTRATION			
Personnel compensation:			
11.1 Full-time permanent	149	149	--
11.3 Other than full-time permanent	20	20	--
11.5 Other personnel compensation	2	2	--
11.9 Total personnel compensation	171	171	--
12.1 Personnel benefits: Civilian	21	21	--
21.0 Travel and transportation of persons	17	25	--
22.0 Transportation of things	5	5	--
23.3 Communications, utilities, and miscellaneous charges	21	83	--
24.0 Printing and reproduction	17	6	--
25.0 Other services	7,612	29	--

Object Classification (in thousands of dollars) (continued)

Identification code 14-1039-0-1-303	1985 actual	1986 estimate	1987 estimate
ALLOCATION TO FEDERAL HIGHWAY ADMINISTRATION (continued)			
26.0 Supplies and materials...............	30	7	--
31.0 Equipment...........................	147	53	--
32.0 Lands and structures................	24,[illegible]00	9,600	--
99.0 Subtotal, obligations, allocation to Federal Highway Administration.....	32,441	10,000	--
99.9 Total obligations....................	32,576	12,095	100

Personnel Summary

Identification code 14-8215-0-7-401	1985 actual	1986 estimate	1987 estimate
ALLOCATION TO FEDERAL HIGHWAY ADMINISTRATION			
Total number of full-time permanent positions	4	4	--
Total compensable workyears:			
Full-time equivalent employment	4	4	--
Average GS grade	8.92	8.92	--
Average GS salary	25,500	25,500	--

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CONSTRUCTION (TRUST FUND)

Program and Financing (in thousands of dollars)

Identification code 14-8215-6-7-401	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations....................	--	-443	--
Financing:			
21.49 Unobligated balance available, start of year: Contract authority...........................	--	--	-443
24.49 Unobligated balance available, end of year: Contract authority...........................	--	443	443
39.00 Budget authority.....................	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net............	--	-443	--
72.40 Obligated balance, start of year....	--	--	-361
74.40 Obligated balance, end of year......	--	361	--
90.00 Outlays...............................	--	-82	-361

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

NATIONAL PARK SERVICE

SUMMARY OF REQUIREMENTS
(Dollar amounts in thousands)

Appropriation: Miscellaneous Trust Funds

Comparison by activity/subactivity:	1985 Actual		1986 Enacted to Date		1987 Base		1987 Estimate		Inc.(+)/Dec.(-) from 1986 Est.		Inc.(+)/Dec.(-) from 1987 Base	
	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount
Miscellaneous Trust Funds......	44	11,414	48	13,205	48	13,205	48	8,833	--	-4,372	--	-4,372

Justification of Program and Performance

Activity: Miscellaneous Trust Funds

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) From Base
National Park Service Donations	($)	13,197	13,197	13,197	8,825	-4,372
	(FTE-T)	(48)	(48)	(48)	(48)	(--)
Preservation, Birthplace of Abraham Lincoln	($)	8	8	8	8	---
Total Requirements	($)	13,205	13,205	13,205	8,833	-4,372
	(FTE-T)	(48)	(48)	(48)	(48)	(--)

National Park Service Donations

Authorization

16 U.S.C. 6

Objectives

To use donated funds consistent with legislative authority and the wishes of the grantor.

Base Program

The Secretary of the Interior is authorized to accept and use donated funds for the purposes of the National Park System. Use of these funds is strictly controlled. In fiscal 1983, the Service began receiving substantial donations from the Statue of Liberty-Ellis Island Foundation and the general public to carry out activities associated with the restoration of these sites. Donations are expected to decline after the 1986 completion of the restoration efforts.

Preservation, Birthplace of Abraham Lincoln

Authorization

16 U.S.C. 211, 212

Objectives

To preserve the Birthplace of Abraham Lincoln.

Miscellaneous Trust Funds

Base Program

The Lincoln Farm Association established an endowment, the proceeds of which are used to help preserve the Abraham Lincoln Birthplace National Historic Site.

Jefferson National Expansion Memorial

Authorization

16 U.S.C. 450jj, as amended.

Objectives

To commemorate the men and women who made possible the territorial expansion of the United States.

Base Program

Contributions are accepted from the City of St. Louis and other non-Federal sources in the ratio of $1 to each $3 of Federal appropriations.

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[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Program and Financing (in thousands of dollars) (continued)

Identification code 14-9972-0-7-303	1985 actual	1986 estimate	1987 estimate
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	13,177	12,439	8,833
72.40 Obligated balance, start of year....	689	6,276	1,182
74.40 Obligated balance, end of year......	-6,276	-1,182	-1,182
78.00 Adjustments in unexpired accounts...	-10	--	--
90.00 Outlays..........................	7,580	17,533	8,833
Distribution of budget authority by account:			
National Park Service, donations.........	11,905	13,197	8,825
Preservation, Birthplace of Abraham Lincoln, National Park Service.........	15	8	8
Distribution of outlays by account:			
National Park Service, donations.........	7,574	17,528	8,825
Preservation, Birthplace of Abraham Lincoln, National Park Service.........	6	5	8

Object Classification (in thousands of dollars)

Identification code 14-9972-0-7-303	1985 actual	1986 estimate	1987 estimate
Personnel compensation:			
11.1 Full-time permanent	1,056	1,152	1,152
11.3 Other than full-time permanent	409	447	447
11.5 Other personnel compensation	104	113	113
11.9 Total personnel compensation	1,569	1,712	1,712
12.1 Personnel benefits: Civilian	159	211	211
21.0 Travel and transportation of persons	182	198	190
22.0 Transportation of things	17	17	17
23.3 Communications, utilities, and miscellaneous charges	210	224	189
24.0 Printing and reproduction	27	13	85
25.0 Other services	10,280	1,845	2,955
26.0 Supplies and materials	378	311	273
31.0 Equipment	95	7,908	3,201
32.0 Lands and structures	260	--	--
99.9 Total obligations	13,177	12,439	8,833

Personnel Summary

Identification code 14-9972-0-7-303	1985 actual	1986 estimate	1987 estimate
Total number of full-time permanent positions	25	27	27
Total compensable workyears:			
Full-time equivalent employment	44	48	48
Average GS grade	12.50	12.50	12.50
Average GS salary	35,659	35,667	35,667
Average salary of ungraded positions	24,312	23,096	23,096

Appropriation Summary Statement

Appropriation: Operation and Maintenance of Quarters

Revenues from the rental of Government-owned quarters to employees of the National Park Service are deposited in a special Treasury account and used to operate and maintain these quarters.

Summary of Requirements

Appropriation: Operation and Maintenance of Quarters

SUMMARY OF BASE ADJUSTMENTS	(Dollar amounts in thousands) FTE-T	Amount
1986 Appropriation	112	9,584
P.L. 99-177 Reduction	—	1/
1986 Adjusted Appropriation	112	9,584
1987 Base Budget	112	9,584

Comparison by activities/ subactivities	1985 Actual		1986 Appropriation Enacted to Date		P.L. 99-177 Reduction	FY 1986 Adjusted Approp.	Fiscal 1987 Base		Fiscal 1987 Estimate		Inc. or Dec.() from 1986 Appropriation		Inc. or Dec.() from 1986 Adjusted Approp.	Inc. or Dec.() From 1987 Base	
	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Amount	FTE-T	Amount
Operation and Maintenance of Quarters	107	8,034	112	9,584	1/	9,584	112	9,534	103	9,987	-9	+403	+403	-9	+403

1/ P.L. 99-177 requires a limitation on obligations for this account of $9,172,000 in fiscal 1986.

Justification of Program and Performance

Activity: Operation and Maintenance of Quarters

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Operation and maintenance of quarters	($)	9,584	9,584 1/	9,584	9,987	+403
	(FTE)	(112)	(112)	(112)	(103)	(-9)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Operation and Maintenance of Quarters	9,584	1/	9,584

The reduction of $412,000 mandated by P.L. 99-177 will result in the deferral of routine maintenance to Government-owned quarters for park employees.

Authorization

P.L. 98-473, section 320

Objectives

To operate and maintain government-owned quarters in a safe and habitable condition for National Park Service employees and families directly through rental income.

Base Program

Revenue from the rental of park housing is deposited in a special Treasury account to operate and maintain these quarters throughout the National Park System.

Increase for 1987	1987 Base	1987 Estimate	Increase
$	9,584	9,987	+403
(FTE-T)	(112)	(103)	(-9)

The increased amount for fiscal 1987 reflects additional estimated receipts from the rental of quarters.

1/ P.L. 99-177 establishes an obligation limitation of $9,172,000 to this account in fiscal 1986.

Operation and Maintenance of Quarters

Distribution of increase by object class

	FTE-T	Amount
Personnel services	-9	-226
Personnel benefits		-18
Other services		+647
Total		+403

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION AND MAINTENANCE OF QUARTERS

Program and Financing (in thousands of dollars)

Identification code 14-5049-0-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Operating costs, funded: Total obligations	7,832	9,584	9,987
Financing:			
21.40 Unobligated balance available, start of year	--	-202	-202
24.40 Unobligated balance available, end of year	202	202	202
60.00 Budget authority (appropriation) (permanent, indefinite, special fund)	8,034	9,584	9,987
Relation of obligations to outlays:			
71.00 Obligations incurred, net	7,832	9,584	9,987
72.40 Obligated balance, start of year	--	-115	--
74.40 Obligated balance, end of year	115	--	--
90.00 Outlays	7,947	9,469	9,987

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION AND MAINTENANCE OF QUARTERS

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-5049-0-2-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority..........................	8,034	9,584	9,987
Outlays...................................	7,947	9,469	9,987
Reduction pursuant to P.L. 99-177:			
Budget authority..........................	--	--	--
Outlays...................................	--	-337	-75
Total:			
Budget authority..........................	8,034	9,584	9,987
Outlays...................................	7,947	9,132	9,912

Object Classification (in thousands of dollars)

Identification code 14-5049-0-2-303	1985 actual	1986 estimate	1987 estimate
Personnel compensation:			
11.1 Full-time permanent	1,995	2,258	2,076
11.3 Other than full-time permanent	463	525	482
11.5 Other personnel compensation	20	22	21
11.9 Total personnel compensation	2,478	2,805	2,579
12.1 Personnel benefits: Civilian	272	345	317
21.0 Travel and transportation of persons	22	25	23
22.0 Transportation of things	51	57	52
23.3 Communications, utilities, and miscellaneous charges	586	656	603
25.0 Other services	1,502	1,986	2,266
26.0 Supplies and materials	2,512	3,321	3,789
31.0 Equipment	347	389	358
32.0 Lands and structures	53	--	--
42.0 Insurance claims and indemnities	2	--	--
44.0 Refunds	7	--	--
99.9 Total obligations	7,832	9,584	9,987

Personnel Summary

Total number of full-time permanent positions	14	14	14
Total compensable workyears:			
Full-time equivalent employment	100	112	103
Average GS grade	7.57	8.01	8.01
Average GS salary	$24,780	$25,041	$25,041

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
OPERATION AND MAINTENANCE OF QUARTERS

Program and Financing (in thousands of dollars)

Identification code 14-5049-6-2-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations....................	--	-412	--
Financing:			
21.40 Unobligated balance available, start of year......................	--	--	-412
24.40 Unobligated balance available, end of year.......................	--	412	412
39.00 Budget authority....................	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-412	--
72.40 Obligated balance, start of year....	--	--	-75
74.40 Obligated balance, end of year......	--	75	--
90.00 Outlays.............................	--	-337	-75

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

[ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR COMMISSION]

[For the operation of the Illinois and Michigan Canal National Heritage Corridor Commission, $250,000.] (Public Law 98-398, Title I; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Justification of Proposed Language Changes

Illinois and Michigan Canal National Heritage Corridor Commission

1. Deletion: "For the operation of the Illinois and Michigan Canal National Heritage Corridor Commission, $250,000."

   Funds for the above item are not requested in fiscal 1987. Therefore, this language is no longer necessary.

Summary of Requirements

Appropriation: Illinois and Michigan Canal National Heritage Corridor Commission

SUMMARY OF BASE ADJUSTMENTS	(Dollar amounts in thousands) FTE-T	Amount
1986 Appropriation	—	248
P.L. 99-177 Reduction	—	-11
1986 Adjusted Appropriation	—	237
Adjustment of 1986 impact of P.L. 99-177	—	+11
1987 Base Budget	—	248
Program Changes(changes to Base Budget)	—	-248
Total Requirements(1987 Estimate)	—	—

Comparison by activities/ subactivities	1985 Actual		1986 Appropriation Enacted to Date		P.L. 99-177 Reduction	FY 1986 Adjusted Approp.	Fiscal 1987 Base		Fiscal 1987 Estimate		Inc. or Dec.() from 1986 Appropriation		Inc. or Dec.() from 1986 Adjusted Approp.	Inc. or Dec.() From 1987 Base	
	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Amount	FTE-T	Amount
Illinois and Michigan Canal National Heritage Commission Corridor	—	245	—	248	-11	237	—	248	—	—	—	-248	-237	—	-248

NATIONAL PARK SERVICE

Justification of Adjustments to Base

(dollar amounts in thousands)

	FTE	Amount
Appropriation: Illinois and Michigan Canal National Heritage Corridor Commission		
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellations............	—	+11

The Balanced Budget and Deficit Control of Act of 1986 (P.L. 99-177) requires a 4.3 percent reduction in non-exempt programs. Since this reduction occurs only in fiscal 1986, this adjustment is made to allow a more comparable basis for showing program charges from fiscal 1986 to fiscal 1987.

Justification of Program and Performance

Activity: Illinois and Michigan Canal National Heritage Corridor Commission

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Illinois and Michigan Canal National Heritage Corridor	($)	248	237	248	--	-248
Commission	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Illinois and Michigan Canal National Heritage Corridor Commission	248	-11	237

As a result of the $11,000 P.L. 99-177 reduction, the purchase of supplies and materials, the printing of planning documents, and travel to sites along the National Heritage Corridor by commission members will be reduced.

Authorization

Public Law 98-398.

Objectives

To fund the activities of the Illinois and Michigan Canal National Heritage Corridor Commission.

Base Program

On August 24, 1984, President Reagan signed into law the Illinois and Michigan Canal National Heritage Corridor Act of 1984 (Public Law 98-398). The legislation establishes a commission to administer the corridor which stretches from LaSalle, Illinois, to Navy Pier in downtown Chicago.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	248	--	-248
(FTE-T)	(--)	(--)	(--)

Although direct Federal support is authorized by P.L. 98-398, the Service is proposing to eliminate funding for the Illinois and Michigan Canal National Heritage Corridor Commission as part of the Governmentwide effort to reduce spending. Private sources of funding should be found to support the activities of the commission.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR COMMISSION

Program and Financing (in thousands of dollars)

Identification code 14-1043-0-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations	245	248	--
Financing:			
39.00 Budget authority.....................	245	248	--
Budget authority:			
40.00 Appropriation.......................	245	250	--
40.00 Reduction pursuant to P.L. 99-190...	--	-2	--
43.00 Appropriation (adjusted)............	245	248	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	245	248	--
72.40 Obligated balance, start of year....	--	243	243
74.40 Obligated balance, end of year......	-243	-243	--
90.00 Outlays.............................	2	248	243

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR COMMISSION

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-1043-0-1-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority.........................	245	248	--
Outlays..................................	2	248	243
Reduction pursuant to P.L. 99-177:			
Budget authority.........................	--	-11	--
Outlays..................................	--	-5	-6
Total:			
Budget authority.........................	245	237	--
Outlays..................................	2	243	237

Object classification (in thousands of dollars)

Identification code 14-1043-0-1-303	1985 actual	1986 estimate	1987 estimate
21.00 Travel and transportation of persons	2	2	—
25.00 Other services	242	245	—
26.00 Supplies and materials	1	1	—
99.0 Total obligations	245	248	—

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
ILLINOIS AND MICHIGAN CANAL NATIONAL HERITAGE CORRIDOR COMMISSION

Program and Financing (in thousands of dollars)

Identification code 14-1043-6-1-303	1985 actual	1986 estimate	1987 estimate
Program by Activities:			
10.00 Total obligations..................	--	-11	--
Financing:			
40.00 Budget authority (appropriation)....	--	-11	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-11	--
72.00 Obligated balance, start of year....	--	--	-6
74.40 Obligated balance, end of year......	--	6	--
90.00 Outlays.............................	--	-5	-6

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

[JEFFERSON NATIONAL EXPANSION MEMORIAL COMMISSION]

[For the operation of the Jefferson National Expansion Memorial Commission, $75,000.] (Public Law 98-398, Title II; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Justification of Proposed Language Changes

Jefferson National Expansion Memorial Commission

1. Deletion: "For the operation of the Jefferson National Expansion Memorial Commission, $75,000."

   Funds for the above item are not requested in fiscal 1987. Therefore, this language is no longer necessary.

Summary of Requirements

Appropriation: Jefferson National Expansion Memorial Commission

SUMMARY OF BASE ADJUSTMENTS	(Dollar amounts in thousands) FTE-T	Amount
1986 Appropriation	—	75
P.L. 99-177 Reduction	—	-3
1986 Adjusted Appropriation	—	72
Adjustment of 1986 impact of P.L. 99-177	—	+3
1987 Base Budget	—	75
Program Changes(changes to Base Budget)	—	-75
Total Requirements(1987 Estimate)	—	—

	1985 Actual		1986 Appropriation Enacted to Date		P.L. 99-177 Reduction	FY 1986 Adjusted Approp.	Fiscal 1987 Base		Fiscal 1987 Estimate		Inc. or Dec.() from 1986 Appropriation		Inc. or Dec.() from 1986 Adjusted Approp.	Inc. or Dec.() From 1987 Base	
Comparison by activities/ subactivities	FTE-T	Amount	FTE-T	Amount	Amount	Amount	FTE-T	Amount	FTE-T	Amount	FTE-T	Amount	Amount	FTE-T	Amount
Jefferson National Expansion Memorial Commission	—	73	—	75	-3	72	—	75	—	—	—	-75	-72	—	-75

NPS-352

NATIONAL PARK SERVICE

Justification of Adjustments to Base

(dollar amounts in thousands)

	FTE-T	Amount
Appropriation: Jefferson National Expansion Memorial Commission		
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellations............	—	+3

The Balanced Budget and Deficit Control of Act of 1986 (P.L. 99-177) requires a 4.3 percent reduction in non-exempt programs. Since this reduction occurs only in fiscal 1986, this adjustment is made to allow a more comparable basis for showing program charges from fiscal 1986 to fiscal 1987.

Justification of Program and Performance

Activity: Jefferson National Expansion Memorial Commission

(dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Jefferson National Expansion Memorial Commission	($)	75	72	75	--	-75
	(FTE-T)	(--)	(--)	(--)	(--)	(--)

Gramm-Rudman-Hollings Impact

	1986 Enacted to Date	P.L. 99-177 Reduction	1986 Adjusted Approp.
Jefferson National Expansion Memorial Commission	75	-2	-73

As a result of the $2,000 P.L. 99-177 reduction, the purchase of supplies and materials, the printing of planning documents, and travel to the East St. Louis memorial area by commission members will be curtailed.

Authorization

Public Law 98-473

Objectives

To fund the activities of the Jefferson National Expansion Memorial Commission

Base Program

On August 24, 1984, President Reagan signed into law the Jefferson National Memorial Amendments Act of 1984 (Public Law 98-398). This law authorizes the addition to the Jefferson National Expansion Memorial of not more than 100 acres in the city of East St. Louis, Illinois. The law requires the establishment of a commission which must develop and transmit to the Secretary of the Interior a plan for the development and management of the East St. Louis portion of the memorial.

Decrease for 1987	1987 Base	1987 Estimate	Decrease
$	75	--	-75
(FTE-T)	(--)	(--)	(--)

The Service is proposing to eliminate funding for the Jefferson National Expansion Memorial Commission as part of the Governmentwide effort to reduce Federal spending. Private sources of funding should be found to support the activities of the commission.

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
JEFFERSON NATIONAL EXPANSION MEMORIAL COMMISSION

Program and Financing (in thousands of dollars)

Identification code 14-1044-0-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	73	75	—
Financing:			
40.00 Budget authority (appropriation)....	73	75	—
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	73	75	--
72.40 Obligated balance, start of year....	—	64	64
74.40 Obligated balance, end of year......	-64	-64	--
90.00 Outlays.............................	9	75	64

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
JEFFERSON NATIONAL EXPANSION MEMORIAL COMMISSION

SUMMARY OF BUDGET AUTHORITY AND OUTLAYS
(in thousands of dollars)

Identification code 14-1044-0-1-303	1985 actual	1986 estimate	1987 estimate
Enacted/requested:			
Budget authority........................	73	75	--
Outlays.................................	9	75	64
Reduction pursuant to P.L. 99-177:			
Budget authority........................	--	-3	--
Outlays.................................	--	-2	-1
Total:			
Budget authority........................	73	72	--
Outlays.................................	9	73	63

Object classification (in thousands of dollars)

Identification code 14-1044-0-1-303	1985 actual	1986 estimate	1987 estimate
11.1 Personnel compensation: Full-time permanent	8	8	—
12.1 Personnel benefits: Civilian........	1	1	—
21.0 Travel and transportation of persons..........................	1	1	—
25.0 Other services......................	63	65	—
99.0 Total obligations....................	73	75	—

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
JEFFERSON NATIONAL EXPANSION MEMORIAL COMMISSION

Program and Financing (in thousands of dollars)

Identification code 14-1044-6-1-303	1985 actual	1986 estimate	1987 estimate
Program by activities:			
10.00 Total obligations..................	--	-3	--
Financing:			
40.00 Budget authority (appropriation)....	--	-3	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net...........	--	-3	--
72.40 Obligated balance, start of year....	--	--	-1
74.40 Obligated balance, end of year......	--	1	--
90.00 Outlays.............................	--	-2	-1

These reductions are required by the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99-177).

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL CAPITAL REGION ARTS AND CULTURAL AFFAIRS

Program and Financing (in thousands of dollars)

Identification code 14-1035-0-1-303	1985 actual	1986 estimate	1987 estimate
Financing:			
39.00 Budget authority	--	--	--
Budget authority:			
60.00 Appropriation	--	4,900	--
61.00 Transferred to other accounts	--	-4,900	--
63.00 Appropriation (adjusted)	--	--	--
Relation of obligations to outlays:			
71.00 Obligations incurred, net	--	--	--
90.00 Outlays	--	--	--

Department of the Interior
National Park Service

Consulting Service

Appropriation	Description	Program	FY 85	FY 86	FY 87
Operation of the National Park System	Metallurgy Specialist Consultant	Statue of Liberty restoration in the North Atlantic Region	$15,000	$30,000	-0-

Type size:
8 point
14½ picas
Pol. lit. solid

STANDARD FORM 306
July 1966, Bureau of the Budget
Circular No. A-11, Revised.
306-103

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
CONSOLIDATED SCHEDULE OF PERMANENT POSITIONS

DETAIL OF PERMANENT POSITIONS

	1985 actual	1986 estimate	1987 estimate
ES-6	1	1	1
ES-5	4	5	5
ES-4	10	10	10
ES-3	3	3	3
ES-2	1	1	1
Subtotal	19	20	20
GS/GM-15	104	102	100
GS/GM-14	211	205	190
GS/GM-13	571	550	540
GS-12	1,003	980	975
GS-11	1,042	1,032	1,012
GS-10	13	13	13
GS-9	1,068	1,050	1,028
GS-8	48	48	48
GS-7	821	815	810
GS-6	615	603	600
GS-5	1,582	1,585	1,639
GS-4	661	660	660
GS-3	204	200	200
GS-2	24	24	24
GS-1	3	4	4
Subtotal	7,989	7,891	7,863
Ungraded	4,011	4,050	4,000
Total permanent positions	12,000	11,941	11,863
Unfilled positions, end of year	-228	-321	-317
Total permanent employment, end of year	11,772	11,620	11,546

(Mono cast: 16.5) (Mono cast: 4.9) (Mono cast: 4.9) (Mono cast: 4)

NPS-361

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUDGET JUSTIFICATIONS, F. Y. 1987

March 3, 1849

NOTICE: These budget justifications are prepared for the Interior and Related Agencies Appropriations Subcommittees. Approval for release of the justifications prior to their printing in the public record of the Subcommittee hearings may be obtained from the Subcommittees through the Office of Budget of the Department of the Interior.

GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY
Fiscal Year 1987 Budget
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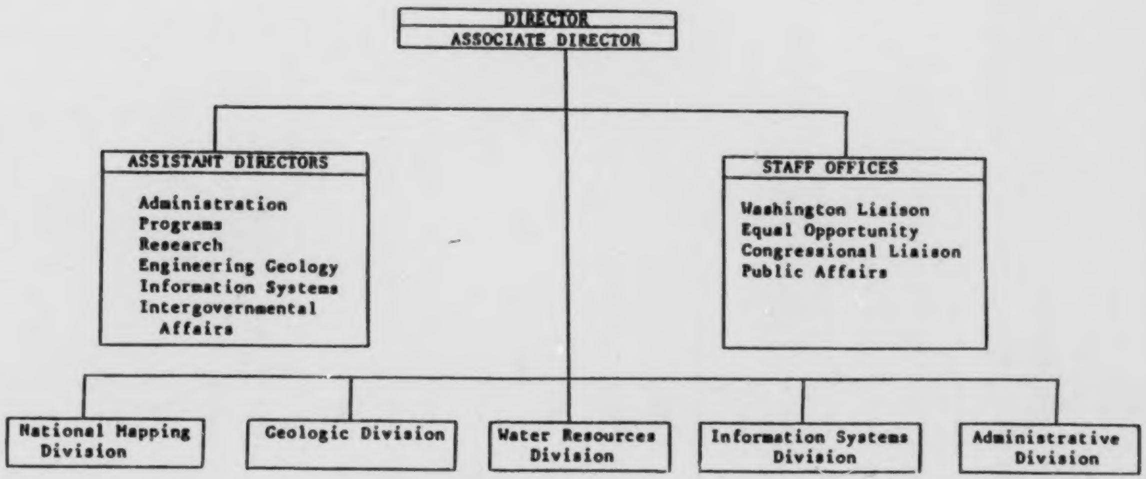
U.S. Department of the Interior

GEOLOGICAL SURVEY


DIRECTOR
ASSOCIATE DIRECTOR
ASSISTANT DIRECTORS
Administration
Programs
Research
Engineering Geology
Information Systems
Intergovernmental Affairs
STAFF OFFICES
Washington Liaison
Equal Opportunity
Congressional Liaison
Public Affairs
National Mapping Division
Geologic Division
Water Resources Division
Information Systems Division
Administrative Division

GENERAL STATEMENT

The Geological Survey's basic authorization for Surveys, Investigations, and Research (SIR) is included in an Act of March 3, 1879 (43 U.S.C. 31). The basic authority, although brief, is very broad in scope as follows:

> "The Director of the Geological Survey, which office is established under the Interior Department, shall be appointed by the President by and with the advice and consent of the Senate. This officer shall have the direction of the Geological Survey, and the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain. The Director and members of the Geological Survey shall have no personal or private interests in the land or mineral wealth of the region under survey, and shall execute no surveys or examinations for private parties or corporations."

This authority has been amplified and expanded by administrative action and by additional legislative actions such as 43 U.S.C. 31(b), which extended the Geological Survey's jurisdiction outside the national domain when determined by the Secretary to be in the national interest.

The major missions of the Geological Survey are to undertake research, fact finding, and mapping aimed at enlarging the Nation's knowledge about the extent, distribution, and character of its natural resources, and about the geologic processes, structures, and hazards that affect the development and use of the land and the physical environment.

The following summary compares the FY 1986 and the FY 1987 estimates:

(Dollar Amounts in Thousands)

Appropriation		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Estimate	Inc. or Dec. from Enacted	Perm. Emp. 12/31/85
Surveys, Investigations, and Research	$	429,369	410,906	395,500	-33,869	8,409
	(FTE-T)	7,592	7,592	7,525	-67	
Contributed Funds	$	500	500	500	--	
	(FTE-T)	--	--	--	--	
TOTAL, USGS	$	429,869	411,406	396,000	-33,869	
	(FTE-T)	7,592	7,592	7,525	-67	

Highlights of the FY 1987 Request

The changes between the FY 1986 enacted appropriation and the requested FY 1987 budget are highlighted below.

SURVEYS, INVESTIGATIONS, AND RESEARCH

The programs of the Geological Survey are designed to provide basic scientific data and analyses concerning water, land, energy, and mineral resources. The programs and missions included in the SIR appropriation are conducted through three operating units: the National Mapping, Geologic, and Water Resources Divisions. There are two support service divisions, the Administrative Division and the Information Systems Division.

Funds are requested to continue the multiyear effort to further develop and apply advances in automated cartographic production techniques. Decreases are proposed for the primary mapping and revision, intermediate, small scale, special and image mapping, and remote sensing applications research programs. The side-looking airborne radar program is proposed for elimination because the technology has been demonstrated and applications data can be acquired from the private sector as needed.

Within geologic research and investigations, decreases are proposed in scientific investigations related to earthquake and landslide hazards, cooperative geologic mapping, geomagnetism, mineral, coal and geothermal resource investigations and investigations of offshore geologic framework and coastal erosion processes.

In the Federal water resources area funds are proposed to enhance a national water-quality assessment initiative. This effort, which is being coordinated with other Federal agencies and State interests, will support the development of national policy related to degraded water quality nationwide. The FY 1987 request continues a program of data acquisition, interpretation and assessment of the quality of the Nation's surface- and ground-water resources which will provide needed information on the status and trends of the chemical and physical quality of this essential resource.

Decreases are proposed in both the Federal and Federal/State cooperatively funded data collection and analyses programs, national water data and information access, regional aquifer analysis, core hydrologic research, improved instrumentation, nuclear waste hydrology and acid rain programs. The Water Resources Research Institutes and Grants Programs and associated administrative costs are also proposed at reduced funding levels.

BUDGET STRUCTURE CHANGES

Within the National Mapping Geography and Surveys Activity the Federal Land Information System program element no longer emphasizes mineral data, exclusively, as it covers research aimed at bringing diverse earth science digital data together for computer-based analysis.

Changes involving program elements have been made to better reflect and describe certain functions within the Geologic and Mineral Resource Surveys and Mapping Activity. A new program element titled National Mineral Resource Assessment Program combines the Alaska, Conterminous States and Mineral Resources of Public Lands programs into a single program. This new program element more accurately reflects the shifting emphasis to provide the flexibility required to respond to mineral assessment needs over very broad geographic areas as well as smaller, specific locations. The Onshore Oil and Gas Investigations program element is renamed Oil and Gas Investigations to accommodate the assessment of hydrocarbon resources within the entire national domain.

Within the Water Resources Investigations Activity a program element titled National Water-Quality Assessment Program has been added to the National Water Resources Research and Information System - Federal Program subactivity. This program element addition reflects the Geological Survey's new water-quality assessment initiative.

CONTRIBUTED FUNDS

Funds in this account, established in FY 1983, are provided by States, local governments, and private organizations for activities of mutual interest and benefit to the Geological Survey.

EXPLORATION OF NATIONAL PETROLEUM RESERVE IN ALASKA

Additional budget authority has not been requested for this appropriation since FY 1982 when the exploration activity ended. Final closeout activities and audits are scheduled for completion in 1986 and reports detailing the results of the program which began in 1974 will be completed.

Appropriation Summary Statement

Appropriation: Surveys, Investigations, and Research

The programs of the Geological Survey are designed to provide basic scientific data and analyses concerning water, land, energy, and mineral resources. The programs and missions included in the SIR appropriation are conducted through three operating units: the National Mapping, Geologic, and Water Resources Divisions. There are two support service divisions, the Administrative Division and the Information Systems Division.

The FY 1987 appropriation request totals $395,500,000, a decrease of $33,869,000 from the FY 1986 enacted level of $429,369,000. A summary of the programmatic changes proposed for FY 1987 is discussed below:

National Mapping, Geography, and Surveys--The objectives of the National Mapping Program are to produce and make available cartographic and geographic information, multipurpose maps such as topographic, land use/land cover, and various base and special purpose maps, and basic cartographic and geographic data in printed and digital format to meet the continually expanding needs of the Nation. The USGS has been assigned all coordinating responsibilities for both mapping and digital cartographic activities governmentwide.

Increased funding is requested to support the second year of the Advanced Cartographic Systems initiative in order to retain the capability of applying Department of Defense classified source material to domestic mapping needs. Acquisition of state-of-the-art cartographic equipment and software will be the principal focus in year two of this multiyear effort. When fully implemented, this system will significantly increase the Geological Survey's cartographic production capability.

Decreases are proposed for the primary mapping and revision, intermediate, small scale, special and image mapping and remote sensing applications research programs. The side-looking airborne radar program is proposed for elimination because the technology has been demonstrated and applications data can be acquired from the private sector as needed.

Geologic and Mineral Resource Surveys and Mapping--The continuing national program of geologic research and investigations produces: 1) new and improved methods, techniques, and instruments for mineral and energy resource assessments on land and seaward through the Exclusive Economic Zone, including the submerged continental margins; 2) geologic, geophysical, and geochemical maps and analyses that show the distribution, age, composition, structure, and physical properties of the rocks and mineral deposits at and beneath the surface of the Earth, including the continental shelves and slopes; 3) information on the chemistry and physics of the Earth, the climate, and the geologic processes by which it was formed and is being continually modified; 4) information on geologic hazards such as earthquakes, volcanoes, landslides, and land subsidence which affect human safety, urban development, and the engineering design of sensitive structures including nuclear reactors and defense facilities, as well as public facilities in urban areas; and 5) data and analysis for use by other Federal and State agencies in the management of Federal lands, wilderness studies, and multiuse planning, and in national policy determinations including energy development and mineral resource availability.

Decreases are proposed in scientific investigations related to earthquake and landslide hazards, cooperative geologic mapping, geomagnetism, mineral, coal and geothermal resource investigations and investigations of offshore geologic framework and coastal erosion processes.

Water Resources Investigations--The continuing national program of water resources investigations has the objective of assuring that the Nation's water resources are appraised and that the water data necessary to develop and manage them efficiently and effectively are available when needed. The program produces data, information, and analysis on the flow and sediment discharge of rivers; location and quantity of underground water; chemical quality and temperature of water; changes caused by nature and by man; and availability, suitability, and use of water for present and future demands--all of which are essential to water planning, water management, energy development and enhancement of the quality of the environment. Included in the program is research needed to increase our understanding of fundamental principles of water occurrence, movement, and interaction with its environment, and also to improve the accuracy and usefulness of water data through improvement in technology and methodology.

Increased funds are requested to support a new program, a National Water-Quality Assessment Program. This program, which will be implemented in consultation with other Federal and State interests, will feature a continuing program of data acquisition, interpretation and assessment of the quality of the Nation's water resources which will provide needed information on the status and trends of the chemical and physical quality of this essential resource. This information will provide an important data base needed for the development of a national policy related to degraded water quality nationwide.

Decreases are proposed in both the Federal and Federal/State cooperatively funded data collection and analyses programs, national water data and information access, regional aquifer analysis, core hydrologic research, improved instrumentation, nuclear waste hydrology and acid rain programs. The Water Resources Research Institutes and Grants Programs and associated administrative costs are also proposed at reduced funding levels.

General Administration--General administrative expenses provide for management, executive direction and coordination, and administrative support. This includes such essential functions as budget, program formulation and evaluation, finance, personnel, contract negotiation and analysis. General administrative expenses are financed in part by the budget line item and in part by assessments on funds from other Federal agencies and sundry non-Federal sources. Reductions are proposed in overall administrative support activities to reflect the proposed bureauwide programmatic and personnel reductions.

Facilities--The funds included in this activity finance the operation and maintenance costs, facilities management needs and related special support services necessary for the operation of the National Center Headquarters Complex and major field centers.

Reimbursements from non-Federal sources are from States and municipalities for making cooperative topographic and geologic surveys and water resources investigations (43 U.S.C. 48); proceeds from sale to the public of copies of photographs and records (43 U.S.C. 450); proceeds from sale of personal property (40 U.S.C. 481(c)); reimbursements from permittees and licensees of the Federal Energy Regulatory Commission (16 U.S.C. 797); and reimbursements from friendly countries and international organizations for technical assistance (22 U.S.C. 2357). Reimbursements from other Federal agencies (31 U.S.C. 686) are for special-purpose mapping, investigations, and computer services performed at the request of the financing agency, much of which contributes to the basic objectives of the Geological Survey.

GEOLOGICAL SURVEY

Federal Funds

General and special funds:

SURVEYS, INVESTIGATIONS, AND RESEARCH

For expenses necessary for the Geological Survey to perform surveys, investigations, and research covering topography, geology, *hydrology*, and the mineral and water resources of the United States, its Territories and possessions, and other areas as authorized by law (43 U.S.C. 31, 1332 and 1340); classify lands as to their mineral and water resources; give engineering supervision to power permittees and Federal Energy Regulatory Commission licensees; administer the minerals exploration program (30 U.S.C. 641); and publish and disseminate data relative to the foregoing activities; [$431,961,000] *$395,500,000*: *Provided*, That [$52,324,000] *$50,414,000* shall be available only for cooperation with States or municipalities for water resources investigations: *Provided further*, That no part of this appropriation shall be used to pay more than one-half the cost of any topographic mapping or water resources investigations carried on in cooperation with any State or municipality[: *Provided further*, That in fiscal year 1986 and thereafter, all amortization fees resulting from the Geological Survey providing telecommunications services shall be deposited in a special fund to be established on the books of the Treasury and be immediately available for payment of replacement or expansion of telecommunications services, to remain available until expended]: *Provided further*, That *in fiscal year 1987 and thereafter* the Geological Survey is authorized to accept lands, buildings, equipment, and other contributions from public and private sources and to prosecute projects in cooperation with other agencies, Federal, State, or private. *(Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)*

Justification of Proposed Language Change

Surveys, Investigations, and Research

Insertion of the term, hydrology, in the program description portion of the appropriation language for the Geological Survey serves to reflect all of the major scientific disciplines resident in the Bureau which are involved in the conduct of surveys, investigations, and research, associated with the characterization and assessment of the Nation's land, mineral, energy and water resources.

Insertion of the phrase in fiscal year 1987 and thereafter provides permanent authority for the Geological Survey to accept lands, buildings, equipment, and other contributions from public and private sources and to prosecute projects in cooperation with other agencies, Federal, State, or private. The authority will be codified and removed from the annual appropriations language as has been done with similar authorities over the years.

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
Appropriation: Surveys, Investigations, and Research

Appropriation language and citations:

1. **For expenses necessary for the Geological Survey to perform surveys, investigations, and research covering topography, geology, and the mineral and water resources of the United States,**

43 U.S.C. 31(a)

43 U.S.C. 31(a) provides for establishment of the Office of the Director of the Geological Survey, under the Interior Department, and that this officer shall have direction of the Geological Survey, and the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain.

2. **its Territories and possessions, and other areas as authorized by law.**

43 U.S.C. 31(b)
43 U.S.C. 1332(a)
43 U.S.C. 1340

43 U.S.C 31(b) provides that, "The authority of the Secretary of the Interior, exercised through the Geological Survey of the Department of the Interior, to examine the geological structure, mineral resources, and products of the national domain, is expanded to authorize such examinations outside the national domain where determined by the Secretary to be in the national interest."

43 U.S.C. 1332(a) provides that, "It is the declared policy of the United States, that the subsoil and seabed of the Outer Continental Shelf appertain to the United States and are subject to its jurisdiction, control, and power of disposition as provided in this subchapter."

43 U.S.C. 1340 provides that, "Any agency of the United States and any person authorized by the Secretary may conduct geological and geophysical exploration in the Outer Continental Shelf. ..."

3. **Classify lands as to their mineral and water resources;**

43 U.S.C. 31(a)

43 U.S.C. 31(a) provides that, "The Director of the Geological Survey, ... shall have the direction of the Geological Survey, and the classification of public lands and examination of the geological structure, mineral resources, and products in the National domain. ..."

4. give engineering supervision to power permittees

43 U.S.C. 959, 961

43 U.S.C. 959 provides that, "The Secretary of the Interior is authorized and empowered, ... to permit the use of right of way through the public lands, forest, and other reservations of the United States ... for electrical plants, poles, and lines for the generation and distribution of electrical power, ... Provided, that such permits shall be allowed within or through any of said parks or any forest, military, Indian, or other reservation only upon approval of the Chief Officer of the Department under whose supervision such park or reservation falls and upon a finding by him that the same is not incompatible with the public interest ..."

43 U.S.C. 961 provides that, "The head of the department having jurisdiction over the lands be, and he is, authorized and empowered, ... to grant an easement for right of way, ... over, across and upon the public lands and reservations of the United States for electrical poles and lines for the transmission and distribution of electrical power ... upon a finding by him that the same is not incompatible with the public interest ..."

5. and Federal Energy Regulatory Commission licensees;

16 U.S.C. 797(c)

16 U.S.C. 797(c) states that, "To cooperate with the executive departments and other agencies of States or National Governments in such investigations; and for such purposes the several departments and agencies of the National Government are authorized and directed upon the request of the commission, to furnish such records, papers and information in their possession as may be requested by the commission, and temporarily to detail to the commission such officers or experts as may be necessary in such investigations."

6. administer the minerals exploration program;

30 U.S.C. 641

30 U.S.C. 641 provides that, "The Secretary of the Interior is hereby authorized and directed, in order to provide for discovery of additional domestic mineral reserves, to establish and maintain a program for exploration by private industry within the United States, its territories and possessions for such minerals, excluding organic fuels, as he shall from time to time designate, and to provide Federal financial assistance on a participating basis for that purpose."

7. and publish and disseminate data relative to the foregoing activities;

43 U.S.C. 41
44 U.S.C. 1318
44 U.S.C. 1320

43 U.S.C. 41 provides for the publication of geological and economic maps, illustrating the resources and classification of the lands, and reports upon general and economic geology and paleontology. This section also provides for the scientific exchange and sale of such published material.

44 U.S.C. 1318 provides for publication, by the Geological Survey, of various reports, including a report of mineral resources of the United States, bulletins and professional papers, and monographs. This section also specifies, in some instances, numbers of copies to be printed and the distribution thereof.

44 U.S.C. 1320 provides for the distribution by the Director of the Geological Survey of copies of sale publications to public libraries.

8. Provided, That $52,868,000 shall be available only for cooperation with States or municipalities for water resources investigations:

43 U.S.C. 48

43 U.S.C. 48 provides that, "...amounts received by the Geological Survey from any State, Territory or political subdivision thereof in carrying on work involving cooperation to be used in reimbursing the appropriation from which the expense of such work was paid, was from the act making appropriations for the Department of the Interior for the fiscal year ending June 30, 1928, and for other purposes, act January 12, 1927, ch. 277, 1, 44 Stat. 963, and has not been repeated in subsequent appropriation acts."

Similar provisions were contained in the following act: 1926--May 10, 1926, ch. 277, 1, 44 Stat. 487.

9. Provided further, That no part of this appropriation shall be used to pay more than one-half the cost of any topographic mapping or water resources investigations carried on in cooperation with any State or municipality.

43 U.S.C. 50

43 U.S.C. 50 provides that, "The share of the Geological Survey in any topographic mapping or water resources investigations carried on in cooperation with any State or municipality shall not exceed 50 per centum of the cost thereof. ..."

10. Provided further, That the Geological Survey is authorized to accept lands, buildings, equipment, and other contributions from public and private sources and to prosecute projects in cooperation with other agencies, Federal, State, or private:

43 U.S.C. 31(a)
P.L. 97-394

Public Law 97-394 authorizes the Geological Survey to accept contributions from public and private sources.

Proposed new appropriation language

11. Insertion of the term, hydrology, in the program description portion of the appropriation language for the Geological Survey serves to reflect all of the major scientific disciplines resident in the Bureau which are involved in the conduct of surveys, investigations, and research, associated with the characterization and assessment of the Nation's land, mineral, energy and water resources.

12. Provided further, That in fiscal year 1987 and thereafter the Geological Survey is authorized to accept lands, buildings, equipment, and other contributions from public and private sources and to prosecute projects in cooperation with other agencies, Federal, State, or private.

This addition provides permanent authority which would remain codified but would not be required in each fiscal year's appropriation language.

Surveys, Investigations, and Research
Activity/Subactivity Change Crosswalk - FY 1986 Estimate
(Dollars in thousands)

Format of FY 1986 Congressional Budget		Format of FY 1987 Congressional Budget	
Activity/Subactivity	Amount 1986 Enacted	Activity/Subactivity	Amount 1986 Enacted
Nat'l Mapping, Geography & Surveys: No Change	87897	Nat'l Mapping, Geography & Surveys: No Change	87897
Geologic & Mineral Resource Surveys & Mapping: No Change	173014	Geologic & Mineral Resource Surveys & Mapping: No Change	173014
Water Resources Investigations: No Change	140859	Water Resources Investigations: No Change	140859
General Administration: No Change	13422	General Administration: No Change	13422
Facilities: No Change	14177	Facilities: No Change	14177
TOTAL-SIR........................	429369	TOTAL-SIR........................	429369

NOTE: Explanation of changes in structure included separately under each activity narrative section.

Surveys, Investigations, and Research
Activity/Subactivity Change Crosswalk - FY 1987 Estimate
(Dollars in thousands)

Format of FY 1986 Congressional Budget		Format of FY 1987 Congressional Budget	
Activity/Subactivity	Amount 1987 Estimate	Activity/Subactivity	Amount 1987 Estimate
Nat'l Mapping, Geography & Surveys: No Change	83427	Nat'l Mapping, Geography & Surveys: No Change	83427
Geologic & Mineral Resource Surveys & Mapping: No Change	159016	Geologic & Mineral Resource Surveys & Mapping: No Change	159016
Water Resources Investigations: No Change	124678	Water Resources Investigations: No Change	124678
General Administration: No Change	13356	General Administration: No Change	13356
Facilities: No Change	15023	Facilities: No Change	15023
TOTAL-SIR..........................	395500	TOTAL-SIR..........................	395500

NOTE: Explanation of changes in structure included separately under each activity narrative section.

Summary of Requirements

Appropriation: Surveys, Investigations, and Research

(Dollar amounts in thousands)

	FTE/T *	Amount	FTE/T	Amount
Appropriation, 1986..................................			7592	429369
P.L. 99-177 Budget Authority Cancellation..............			--	-18463
			----	------
Adjusted Appropriation, 1986			7592	410906
Adjustments to base:				
Adjustment for 1986 impact of P.L. 99-177...........	--	18463		
Rental payments to GSA..............................	--	2839		
Shift from National Petroleum Reserve in Alaska to Surveys, Investigations, and Research.............	1	--		
Total, adjustments to base..................			1	21302
			----	------
1987 Base Budget......................................			7593	432208
Program Changes.......................................			-68	-36708
			----	------
Total Requirements (1987 Estimate)....................			7525	395500

Summary of Requirements (continued)

Comparison by Activities/ Subactivities:	1985 Actual		1986 Enacted to Date		P.L. 99-177 Reduct.	1986 Adj. Approp.	1987 Base		1987 Estimate		Inc./Dec. from 1986 Adj. Appr.	Inc./Dec. from 1987 Base	
	FTE-T	Amount	FTE-T	Amount			FTE-T	Amount	FTE-T	Amount		FTE-T	Amount
National Mapping, Geography and Surveys:													
Primary mapping and revision	953	38070	968	37636	-1618	36018	968	37692	956	33266	-2752	-12	-4426
Digital cartography	222	11242	232	13449	-578	12871	232	13499	232	13499	628	0	0
Small, intermediate & special mapping	307	16323	309	14528	-625	13903	309	14548	301	11948	-1955	-8	-2600
Advanced Cartographic Systems	1	4701	3	7406	-318	7088	3	7406	3	12206	5118	0	4800
EROS	69	9594	72	9368	-403	8965	72	9388	72	8888	-77	0	-500
Cartographic & geographic information	99	3579	101	3522	-151	3371	101	3620	101	3620	249	0	0
SLAR	0	1960	0	1988	-87	1901	0	1988	0	0	-1901	0	-1988
Subtotal	1651	85469	1685	87897	-3780	84117	1685	88141	1665	83427	-690	-20	-4714
Geologic and Mineral Resource Surveys and Mapping:													
Geologic hazards surveys	644	51206	638	49475	-2128	47347	638	49696	638	46000	-1347	0	-3696
Land resource surveys	400	20450	400	22606	-972	21634	400	22710	400	21483	-151	0	-1227
Mineral resource surveys	815	45740	818	46578	-2003	44575	818	46791	799	42033	-2542	-19	-4758
Energy geologic surveys	488	30221	477	27926	-1201	26725	477	28053	470	25072	-1653	-7	-2981
Offshore geologic surveys	350	22145	352	26429	-1136	25293	352	26546	352	24428	-865	0	-2118
Subtotal	2697	169762	2685	173014	-7440	165574	2685	173796	2659	159016	-6558	-26	-14780
Water Resources Investigations:													
Nat'l water resources res. & info. system-Federal Prog.	1311	63565	1396	76150	-3275	72875	1396	76350	1375	67015	-5860	-21	-9335
Nat'l water resources res. & info. system-Fed/State Prog.	1421	51679	1502	52010	-2236	49774	1502	52735	1502	50499	725	0	-2236
Nat'l water resources res. & info. system-State research institutes & research grants program	16	8797	16	12699	-546	12153	16	12699	16	7164	-4989	0	-5535
Energy hydrology	133	8803	0	0	0	0	0	0	0	0	0	0	0
Subtotal	2881	132844	2914	140859	-6057	134802	2914	141784	2893	124678	-10124	-21	-17106

Summary of Requirements (continued)

Comparison by Activities/ Subactivities:	1985 Actual FTE-T	1985 Actual Amount	1986 Enacted to Date FTE-T	1986 Enacted to Date Amount	P.L. 99-177 Reduct.	1986 Adj. Approp.	1987 Base FTE-T	1987 Base Amount	1987 Estimate FTE-T	1987 Estimate Amount	Inc./Dec. from 1986 Adj. Appr.	Inc./Dec. from 1987 Base FTE-T	Inc./Dec. from 1987 Base Amount
General Administration:													
Executive Direction	82	4951	79	4587	-197	4390	80	4590	80	4567	177	0	-23
Administrative Operations	252	8655	252	8456	-379	8077	252	8495	251	8410	333	-1	-85
Management Initiative Reductions	0	0	-67	-1259	0	-1259	-67	-1259	-67	-1259	0	0	0
Reimbursements to the Department of Labor	0	1638	0	1638	0	1638	0	1638	0	1638	0	0	0
Subtotal	334	15244	264	13422	-576	12846	265	13464	264	13356	510	-1	-108
Facilities:													
National Center - SLUC	0	11329	0	11329	0	11329	0	12175	0	12175	846	0	0
National Center - Fac. Mgmt	44	1720	44	2848	-610	2238	44	2848	44	2848	610	0	0
Subtotal	44	13049	44	14177	-610	13567	44	15023	44	15023	1456	0	0
Total Requirements	7607	416368	7592	429369	-18463	410906	7593	432208	7525	395500	-15406	-68	-36708

Justification of Adjustments to Base

Appropriation: Surveys, Investigations, and Research	FTE	Amount
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellations.....	--	+$18,463

The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), requires a 4.3 percent reduction in non-exempt programs in FY 1986. Since the 4.3 percent reduction applies to FY 1986 only, this adjustment is made to allow a more comparable basis for showing program changes from FY 1986 to FY 1987.

Rental Payments to GSA....................................	--	+2,839

GSA estimates of Standard Level User Charges (SLUC) for FY 1987 include a net increase of 7.5 percent over the FY 1986 SLUC amounts.

U.S. GEOLOGICAL SURVEY
Activity Summary
Surveys, Investigations, and Research
(Dollars in thousands)

Activity	FY 1985 Actual B.A.	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase or Decrease (-) 1987 Est. over 87 Base
National Mapping, Geography & Surveys	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Geologic & Mineral Resource Surveys & Mapping	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Water Resources Investigations	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
General Administration	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Facilities	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0
TOTAL, SIR	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

U.S. GEOLOGICAL SURVEY
Analysis by Subactivity

Activity: National Mapping, Geography and Surveys

(Dollars in thousands)

Subactivity	FY 1985 Actual B.A.	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase or Decrease (-) 1987 Est. over 87 Base
Primary Mapping & Revision	36070	37636	36018	37692	33266	-4426
Digital Cartography	11242	13449	12871	13499	13499	0
Small, Intermediate & Special Mapping	16323	14528	13903	14548	11948	-2600
Advanced Cartographic Systems	6701	7406	7088	7406	12206	4800
Earth Resources Observation System	9594	9360	8965	9388	8888	-500
Cartographic & Geographic Information	3579	3522	3371	3620	3620	0
SLAR	1960	1988	1901	1988	0	-1988
TOTAL	85469	87897	84117	88141	83427	-4714

National Mapping, Geography and Surveys
Subactivity/Element Change Crosswalk - FY 1986 Estimate
(Dollars in thousands)

Format of FY 1986 Congressional Budget	Amount 1986 Enacted	Format of FY 1987 Congressional Budget	Amount 1986 Enacted
Primary Mapping & Revision-No Change....	37636	Primary Mapping & Revision-No Change......	37636
Digital Cartography-No Change...........	13449	Digital Cartography-No Change.............	13449
Small, Intermediate, & Special Mapping..	14528	Small, Intermediate, & Special Mapping....	14528
Intermediate-scale Mapping	5541	Intermediate-scale Mapping	5541
Small Scale & Other Special Mapping	2105	Small Scale & Other Special Mapping	2105
Federal Mineral Land Information	1441	Federal Land Information	1441 a/
Image Mapping	3951	Image Mapping	3951
Land-use & Land-cover Mapping	1490	Land-use & Land-cover Mapping	1490
Advanced Cartographic Systems-No Change.	7406	Advanced Cartographic Systems-No Change...	7406
Earth Resources Observation Systems-No Change............................	9368	Earth Resources Observation Systems-No Change..............................	9368
Cartographic & Geographic Information-No Change............................	3522	Cartographic & Geographic Information-No Change..............................	3522
SLAR-No Change..........................	1988	SLAR-No Change............................	1988
TOTAL............................	87897	TOTAL..............................	87897

a/ Federal Mineral Land Information program renamed Federal Land Information.

National Mapping, Geography and Surveys
Subactivity/Element Change Crosswalk - FY 1987 Estimate
(Dollars in thousands)

Format of FY 1986 Congressional Budget	Amount 1987 Estimate	Format of FY 1987 Congressional Budget	Amount 1987 Estimate
Primary Mapping & Revision-No Change....	33266	Primary Mapping & Revision-No Change......	33266
Digital Cartography-No Change..........	13499	Digital Cartography-No Change.............	13499
Small, Intermediate, & Special Mapping..	11948	Small, Intermediate, & Special Mapping....	11948
Intermediate-scale Mapping	4091	Intermediate-scale Mapping	4091
Small Scale & Other Special Mapping	1550	Small Scale & Other Special Mapping	1550
Federal Mineral Land Information	1441	Federal Land Information	1441 a/
Image Mapping	3376	Image Mapping	3376
Land-use & Land-cover Mapping	1490	Land-use & Land-cover Mapping	1490
Advanced Cartographic Systems-No Change.	12206	Advanced Cartographic Systems-No Change...	12206
Earth Resources Observation Systems-No Change..........................	8888	Earth Resources Observation Systems-No Change..............................	8888
Cartographic & Geographic Information-No Change..........................	3620	Cartographic & Geographic Information-No Change..............................	3620
SLAR-No Change.........................	0	SLAR-No Change........................	0
TOTAL.............................	83427	TOTAL..............................	83427

a/ Federal Mineral Land Information program renamed Federal Land Information.

Activity Summary

Activity: National Mapping, Geography and Surveys

In support of Federal, State, and public interests the National Mapping Program provides a diversity of cartographic, geographic, and remotely sensed data, products, and services, including basic and special maps in several scales, digital cartographic data, remotely sensed data and maps, and cartographic and geographic information.

The products prepared by the Geological Survey are a collection of data concerning the Earth's natural and cultural features. The cartographic data are accurately interrelated spatially complying with exacting map standards. The information is prepared from aerial photographs, other remotely sensed images, historical records, legal documents, and from direct field observations and surveys.

Information is compiled and kept current for the basic series in the Primary Mapping and Revision subactivity. New and revised map manuscripts are prepared by deriving natural and manmade features from aerial photographs, satellite imagery, and other source materials and plotting this information on an accurately prepared base sheet. Sophisticated digital and analog cartographic and photogrammetric equipment is used in this process. Data derived with this equipment are combined with other information such as boundaries, place names, and road classification developed by direct observation, field surveys, and research of official documents. Feature separates are prepared by scribing similar features on separate overlays, which, when combined and printed, result in the familiar multicolor map. Provisional edition maps meeting National Map Accuracy Standards are published versions of partially color-separated compilation manuscripts with limited map finishing. Adoption of the provisional edition has expedited the mapping process, resulting in map products that are more quickly available to users.

The Digital Cartography Program has as a goal the production and addition of digital cartographic data into the National Digital Cartographic Data Base. Typically, these data include Public Land Survey System, boundaries, hydrography, transportation, and other cultural features found on Geological Survey maps, as well as three-dimensional digital data sets representing the terrain. Graphic and digital land-use and land-cover data are produced to provide the Nation's managers, planners, and developers with the information required to manage the Nation's natural resources.

Advanced Cartographic Systems is a multiyear effort to procure advanced computer assisted cartographic equipment and to develop innovative software techniques and procedures to enhance and expand the capability to produce map products in graphic and digital form.

Remotely sensed data, such as aerial photographs and satellite imagery, are produced, archived, and distributed. The Geological Survey conducts research to develop remote sensing and spatial data applications and to develop advanced information systems. Cooperative applications projects and training courses are used to transfer this technology to Federal and State user agencies.

The Geological Survey is continuing its efforts to provide an improved capability to access selected cartographic and earth science data bases through geographic information system technology. These efforts will expand the analytical capabilities to derive and use earth science information.

The National Mapping Program has evolved from a program of solely producing printed maps to a program involving a multiplicity of advanced cartographic, geographic, and remote sensing efforts. This is necessary to meet enormous demand for map data in land planning development and management.

Research and technical program management within the National Mapping Program are funded by program elements within this budget activity.

Justification of Program and Performance

Activity: National Mapping, Geography, and Surveys
Subactivity: Primary Mapping and Revision

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Primary Mapping and Revision	$	37636		37692	33266	-4426
	FTE-T	968		968	956	-12
Total Requirements	$	37636	36018	37692	33266	-4426
	FTE-T	968	968	968	956	-12

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
37636	-1618	36018

This reduction in funding will delay the availability of cartographic data to meet some mapping needs of governmental organizations, industry, and the public. Production of new and revised primary scale maps will be reduced by 100 maps per year.

Authorization

43 U.S.C. 31 et. seq.	Director of Geological Survey - Establishment of office. This section provides, among other things, that the Geological Survey is authorized to classify the public lands and examine the geological structure, mineral resources, and products within and outside of the national domain.
43 U.S.C. 38	Topographic surveys; marking elevations. This section provides for the establishment and location of permanent benchmarks used in the making of topographic surveys.
43 U.S.C. 49	Extension of cooperative work to Puerto Rico. This section authorizes the making of topographic surveys by the Geological Survey in Puerto Rico.

43 U.S.C. 1318 — Geological Survey: classes and sizes of publications. This section requires that publications of the Geological Survey shall include maps, folios, and atlases required by law. This Section further provides for printing and reprinting of Geological Survey reports and distribution to Congress and the Library of Congress.

Not listed are statutes that authorize the Geological Survey to produce maps and data in support of other Federal agencies' programs.

Primary Mapping and Revision

Objective: To provide current and accurate maps and cartographic data, in primary scales, of the United States and outlying areas of sovereignty and jurisdiction. Primary scales are 1:24,000 in the conterminous States and Hawaii and 1:63,360 in Alaska. These data are produced and disseminated to meet national priorities, and to satisfy specific requirements of Federal and other agencies.

The long-term value of this national resource of cartographic data contained on the maps lies in the currentness and accuracy of the data. Keeping these cartographic data current and accurate is essential to ensure their continued effectiveness for Federal, State, local and private-sector decisionmakers, planners, and managers, as well as for the general public. Advanced techniques will be employed in collecting and processing current cartographic data for the Primary Mapping and Revision Program. These cartographic data will provide a comprehensive source of standard data for entry into the National Digital Cartographic Data Base (NDCDB) and serve as information to produce and revise primary maps and to prepare derivative map products for resource management decisions.

Base Program: As the principal civilian mapping agency for the United States, the Geological Survey, through the National Mapping Program, is responsible for meeting mapping needs of governmental organizations at all levels and the public. The base program provides maps and cartographic data in primary scales with priorities given to those areas of highest national interest. Primary cartographic data and resultant standard maps are fundamental tools which planners and managers use in making informed decisions about the Nation's lands and natural resources. These maps and cartographic data are necessary to support a wide range of activities. Examples of applications include cartographic support for congressionally-mandated programs for land and natural resources management; wetland inventories; floodplain, economic, and industrial studies; location and development of transportation and recreational facilities; evaluation of the impact of natural disasters; and military and civil defense planning. In addition, these data serve as a basic source for primary maps, the NDCDB, and derivative map products.

Program decisions are based on requirements which are received primarily through three established mechanisms: 1) OMB Circular A-16 which results in prioritized requirements from over 30 Federal agencies; 2) joint-funding programs with 23 States; and 3) State Mapping Advisory Committees, in 29

States, which identify statewide requirements. By correlating these identified needs with Congressional guidance and other national interests, the highest priority requirements of the Nation's major users of maps and cartographic data are being addressed each year.

Primary cartographic data are published as 7.5-minute topographic quadrangle maps at 1:24,000 scale with U.S. Customary Units; a few maps are published at 1:25,000 scale with metric units. In Alaska primary cartographic data are published as 15-minute topographic quadrangle maps at 1:63,360 scale with U.S. Customary Units. As of the end of FY 1985, 88 percent of the 7.5-minute maps required to cover the conterminous United States and Hawaii and 88 percent of the 15-minute maps required to cover Alaska were published. In FY 1985 Oklahoma, South Dakota, and Texas were completed. Complete first-time national coverage of the United States with standard or provisional edition primary maps is projected for 1990. The current map completion pace supports this schedule.

The Geological Survey has long adapted to the changing needs of a large and diverse map user clientele and to changing technologies by improving the format and content of its map products and by remaining in the forefront of remote sensing and cartographic technology development. A major goal of the National Mapping Program is to achieve a condition whereby the national inventory of 57,000 primary maps and data contain appropriate and consistent levels of detail, are current, and meet National Map Accuracy Standards. As the Geological Survey approaches the completion of initial primary map coverage for the United States, users of cartographic data have begun to rely increasingly on the use of these data in digital form in conjunction with automated data handling techniques and geographic information systems for land resource applications. The National Mapping Program is in a transition toward map revision, digital cartographic data base development, and automated product generation in order to respond to changing needs. With these program trends clearly evident, an increasing priority is being placed on the revision effort for existing primary maps.

Preserving the usefulness of the current inventory of primary maps and cartographic data requires periodic inspection, and, where necessary, revision to reflect recent natural and manmade changes, and to correct deficiencies and inadequacies of older primary maps and cartographic data. Periodic revision to show changes to the Earth's surface, such as new highways, urban expansion, industrial sites, dams, reservoirs, impacts of surface mining, and changes caused by natural events such as erosion, accretion, floods, volcanoes, and earthquakes are necessary to provide the Nation's decisionmakers with accurate maps and cartographic data which are essential to most national interests.

The Geological Survey uses three procedures to revise primary cartographic data: photorevision, limited revision, and complete revision. Selection of one of these procedures for use in revising cartographic data is based in part upon the results of an inspection using high altitude photographs or other available sources. Areas with high rates of change and high national interest, such as urban areas, coastal areas, major transportation routes, and selected airport areas are planned for inspection on a 5-year cycle. Other areas are inspected less frequently. The current program results in the revision of maps for about 70,000 square miles per year. Included in this continuing revision effort are recompilations of substandard maps to meet current standards for data entry into the National Digital Cartographic Data Base. Currently, the principal method of revision is by photorevision. The following describes the three revision procedures.

> Photorevision--the updating of cartographic data from aerial photographs and other available sources, to reflect planimetric changes which have occurred. The revised data are usually not field checked.
>
> Limited Revision--the correction of specified cartographic data deficiencies and the updating of selected content. Field checks are usually required in limited revision.
>
> Complete Revision--the correction of all deficiencies in planimetric and topographic features, including updating of cartographic data and improving horizontal and vertical accuracy to produce data meeting current specifications. Essentially, complete revision involves the remapping of an area using the latest procedures that are employed in producing new maps.

In FY 1987 additional resources will be allocated to revision to increase emphasis on correcting deficient and inadequate maps and data.

The unit costs for Primary Mapping Program vary depending on such factors as cultural detail (rural versus urban areas), terrain, and geographic location. The average cost for initial primary mapping currently being conducted (mostly in remote areas) is about $475 per square mile. The average cost for revision of cartographic data ranges from about $70 a square mile for photorevisions to about $650 a square mile for complete revisions. The average cost of complete revisions is higher than the average cost of initial primary mapping because these revisions are typically done in complex urban areas which frequently were the first areas mapped.

Selected program outputs are:[1]

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 [2] Estimate
Primary Mapping				
New Maps	1,454	1,350	1,350	1,250
Revision				
Photorevisions	842	1,000	1,000	860
Limited Revisions	52	130	130	150
Complete Revisions	55	20	20	70
Quadrangles Revised	949	1,150	1,150	1,080

[1] These outputs result from total available funds. More than 95 percent of available funds are SIR appropriations; the balance is from reimbursements.

[2] The full impact of the shift in funding into revision on production will be delayed 1 to 2 years due to the revision production cycle.

Subelement costs (in thousands of dollars):

	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from 1986	Inc. (+) Dec. (-) from Base
Primary Mapping	($)29,013	29,058	20,646	-8,367	-8,412
Revision	($) 8,623	8,634	12,620	+3,997	+3,986
Total	($)37,636	37,692	33,266	-4,370	-4,426

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	37,692	33,266	-4,426
(FTE)	(968)	(956)	(-12)

This reduction in funding will delay the availability of cartographic data to national users and will reduce the annual production of new primary scale maps by 100 maps. This reduced production level results in a delay of the completion of first-time national coverage of the United States with standard or provisional edition maps from 1989 into 1990.

Distribution of change by object class:

The object class detail for the proposed $4,426,000 decrease is as follows:

	FTE-T	Amount
Personnel Compensation	-12	$ 359,000
Personnel Benefits		46,000
Travel and Transportation of Persons		110,000
Transportation of Things		126,000
Communications, Utilities and Other charges		291,000
Printing and Reproduction		69,000
Other Services		2,548,000
Supplies and Materials		391,000
Equipment		450,000
Total		$ 4,426,000

Reimbursements for Non-Federal Map Sales: Authorization was made in the FY 1984 appropriations language (Public Law 98-146) for the U.S. Geological Survey to retain receipts from the sale of maps, rather than depositing the receipts into the general fund of the Treasury. These non-Federal map sale receipts provide a source of funds for printing and distributing maps of the U.S. Geological Survey. Accordingly, these offsetting collections are included as reimbursable funds on the Program and Financing Schedule A-11-32A for Surveys, Investigations, and Research.

The current map inventory is approximately 100 million copies down from an inventory level of 114 million copies in FY 1982. Included in the inventory is a complete range of maps at, among others, 1:24,000, 1:100,000, and 1:250,000 scales depicting topographic and thematic cartographic data. There are over 3,300 authorized map dealers throughout the United States, and 13 in foreign countries which sell the U.S. Geological Survey's map products. For FY 1987 the estimated sales volume and reimbursements from maps sold to non-Federal users will total 4,500,000 maps and $7,500,000 to $8,000,000.

Justification of Program and Performance

Activity: National Mapping, Geography, and Surveys
Subactivity: Digital Cartography

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Digital Cartography	$	13449		13499	13499	0
	FTE-T	232		232	232	0
Total Requirements	$	13449	12871	13499	13499	0
	FTE-T	232	232	232	232	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
13449	- 578	12871

This reduction in funding will delay the availability of 1,500 digital line graphs at 1:24,000 scale. This reduction in the production of digital cartographic data will impact current agency requests, such as those from the Bureau of Land Management, the Soil Conservation Service, and the Nuclear Regulatory Commission.

Authorization

43 U.S.C. 31 et. seq.	Director of Geological Survey -Establishment of Office. This section provides, among other things, that the Geological Survey is authorized to classify the public lands and examine the geological structure, mineral resources, and products within and outside of the national domain.
43 U.S.C. 49	Extension of cooperative work to Puerto Rico. This section authorizes the making of topographic surveys by the Geological Survey in Puerto Rico.

Not listed are statutes that authorize the Geological Survey to produce maps and data in support of other Federal agencies' programs.

Digital Cartography

Objectives: To produce base categories of digital cartographic data at standard scales, accuracies, and formats suitable for computer-based analyses to meet Federal, State, local governmental, and non-governmental user requirements; to manage and make available the data through a National Digital Cartographic Data Base; and to coordinate digital mapping programs and activities of Interior bureaus and other Federal agencies to minimize duplication of effort.

Base Program: Digital cartographic data are being increasingly used by State and Federal agencies responsible for managing natural resources and public lands. The data are additionally being used to manage programs which depend on spatial-analysis systems to solve complex problems through computer-based analyses. Use of these data are also of growing importance to the private sector for input to computer-based models to guide the efficient exploration, development, and management of natural resources. In response to these requirements, the Geological Survey is producing in digital form base categories of map data for multiple use, and is distributing the data through a National Digital Cartographic Data Base (NDCDB). The necessary data standards, computer techniques, and equipment capacities are being developed to support the NDCDB.

The U.S. Geological Survey produces two major forms of digital cartographic data: digital line graphs (DLG's) and digital elevation models (DEM's). DLG's represent linear map features such as transportation, hydrography, boundaries, and the Public Land Survey System (PLSS). DEM's are three-dimensional models representing the terrain. Production emphasis is placed on DEM's at 1:24,000 scale and PLSS, boundary, hydrography, transportation and hypsography DLG's from the 1:24,000-scale primary map series and the 1:100,000-scale series.

An immediate need for digital cartographic data at 1:100,000-scale resulted in a major Geological Survey/Bureau of the Census program. A pilot project to digitize all hydrography and transportation categories of data at the 1:100,000 scale for the entire State of Florida was the first step in the joint effort. In FY 1984 the Bureau of the Census and the U.S. Geological Survey signed a Memorandum of Understanding to digitize these categories for the conterminous U.S. and complete this work by mid-FY 1987 so that the data would be available for the preparation of the enumerator maps for the 1990 Decennial Census of Population.

This data will not only be used in support of the 1990 Decennial Census but will also be available, through the Geological Survey's NDCDB, to other agencies, including the Federal Highway Administration, the Federal Emergency Management Agency, the Nuclear Regulatory Commission, the Department of Defense, the Bureau of Land Management.

ISSUE

The U.S. Geological Survey continues to receive requests for an increasing number of 1:100,000-scale DLG's and DEM's. Following are descriptions of a few of the Federal applications of these data:

- The Bureau of Land Management is developing systems which will allow the rapid analysis of the public lands for multiple use. Digitized PLSS data is needed to support the BLM automated lands record information system, and for the the Soil Conservation Service to use in locating primary sample units for soils assessments.

- The National Coal Resources Data System developed by the Geological Survey is a user-oriented computerized storage, retrieval, and display system developed for national coal resource quantity and quality assessments.

- The National Park Service uses slope, aspect, and elevation data generated from DEM's to aid in spectral classification of vegetation and predict fire behavior.

- The Soil Conservation Service and the U.S. Forest Service also use DEM's to produce special slope and aspect maps to aid in soils studies and predict fire behavior under the [illegible] program respectively.

- The Lincoln Laboratory of the Massachusetts Institute of Technology has requested DEM's for use in testing the Cruise Missile and other air vehicles.

- The Nuclear Regulatory Commission and the Federal Emergency Management Agency have requested digital elevation data for a 10-mile radius around each nuclear power plant.

- The Department of Defense mapping requirements include DEM's to support air force training and maneuvers.

Following completion of the [illegible] Geological Survey/Bureau of the Census effort to collect hydrographic and transportation categories of data at 1:100,000-scale production, emphasis will be shifted to responding to an increased number of requirements for 1:100,000-scale data and the collection of other categories of data at 1:100,000 scale. A concerted effort beginning in FY 1987 to digitize PLSS and elevation data from 1:100,000-scale maps will result in a data base of national scope including the primary categories of base cartographic data at the intermediate scale. This data base will be a framework for decisionmaking about natural resources and other spatially related problems on a regional and national basis.

In addition to the applications of digital cartographic data to natural resource management and analysis outside there are also important applications in the mapping process. With digital cartographic data, it will be possible to produce map products and other derivative maps more efficiently than by current manual techniques. Digital cartographic data will also be used to expedite the process of revising maps.

The rapid expansion of the need for digital cartographic data in standard scales, accuracies, and formats suitable for a wide range of applications has resulted in an increased awareness of the need to coordinate Federal digitizing activities. The Geological Survey has expanded its digital cartographic coordination activities in response to actions by the Department of the Interior and OMB.

The Geological Survey maintains an active Federal leadership role in digital cartography. The Geological Survey is designated the lead agency and currently chairs two committees which are analyzing Federal digital cartography activities, identifying requirements for digital cartographic data, and developing digital cartographic data standards.

Based on Federal agencies responses to a survey conducted in 1984 it was found that digitizing of base data categories from national map series and digitizing of thematic spatial data are expected to increase by at least 50 percent by 1986. The report stated that significant dollars continue to be spent by other agencies in collecting duplicate cartographic data due primarily to a lack of coverage of areas of agency interest and incompatible data formats, predominantly for geographic information systems (GIS) use. The Survey is working closely with other Federal agencies to coordinate digital cartographic data activities to ensure duplication of effort. In research and development, future efforts need to focus on replacing present labor-intensive manual table digitizing with automatic raster-to-vector digitizing and on evaluating the capabilities of existing GIS systems. An inventory of Federal systems/hardware was prepared. Applications of digital spatial data vary from preparation of map products to land, water and mineral studies to the use of network simulation models for support of activities such as navigation systems and flight simulators. Applications of digital cartographic data according to the study are extensive, complex, and expected to grow substantially.

Selected program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
1:24,000 scale				
Digital Elevation Models	1,107	1,100	1,200	1,200
Digital Line Graphs	830	2,000	2,200	5,604
1:100,000 scale				
Digital Line Graphs	1,181	1,330	1,330	1,300

Average unit cost ranges from approximately $200 to approximately $1,500 for digitizing a single category of data at 1:24,000 and approximately $6,000 for a single category of hydrography or transportation category of data at 1:100,000 scale.

Justification of Program and Performance

Activity: National Mapping, Geography, and Surveys
Subactivity: Small, Intermediate, and Special Mapping

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Intermed. Scale Mapping	$	5541		5541	4091	-1450
	FTE-T	128		128	123	-5
Small-Scale and Other Special Mapping	$	2105		2125	1550	-575
	FTE-T	61		61	59	-2
Federal Land Information	$	1441		1441	1441	0
	FTE-T	7		7	7	0
Image Mapping	$	3951		3951	3376	-575
	FTE-T	96		96	95	-1
Land-Use and Land-Cover Mapping	$	1490		1490	1490	0
	FTE-T	17		17	17	0
Total Requirements	$	14528	13903	14548	11948	-2600
	FTE-T	309	309	309	301	-8

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
14528	-625	13903

This reduction in funding will defer completion of 1:100,000-scale topographic edition maps and production of county-format maps, special map products, and orthophotoquads in response to Federal and State requirements. Contracting of digitizing land-use and land-cover data will be curtailed for one year due to immediate requirements to meet fixed costs related to personnel.

Authorization

43 U.S.C. 31 et. seq.	Director of Geological Survey - Establishment of office. This section provides, among other things, that the Geological Survey is authorized to classify the public lands and examine the geological structure, mineral resources, and products within and outside of the national domain.

43 U.S.C. 41	Publications and reports; preparation and sale. This section provides that the publications of the Geological Survey shall consist of geological and economic maps illustrating the resources and classification of lands and other reports.
43 U.S.C. 49	Extension of cooperative work to Puerto Rico. This section authorizes the making of topographic surveys by the Geological Survey in Puerto Rico.
43 U.S.C. 1318	Geological Survey: classes and sizes of publications. This section requires that publications of the Geological Survey shall include maps, folios, and atlases required by law. This Section further provides for printing and reprinting of Geological Survey reports and distribution to Congress and the Library of Congress.

Not listed are statutes that authorize the Geological Survey to produce maps and data in support of other Federal agencies' programs.

Intermediate-Scale Mapping

Objectives: To provide multipurpose topographic base maps at 1:50,000 and 1:100,000 scales in quadrangle and county formats to meet a variety of Federal and State requirements.
Base Program: Federal and State agencies need topographic maps which will serve as a base to portray thematic data and provide the common reference required to correlate thematic data of other agencies. The Intermediate-Scale Mapping Program offers accurate base maps at a scale appropriate for multipurpose regional planning.

Intermediate-scale topographic maps are derivative maps produced primarily from 1:24,000-scale primary quadrangle maps. Selected cartographic data from 1:24,000-scale maps are the basis for production of either 1:50,000 or 1:100,000 scale maps which are published with map content appropriate for that scale. Intermediate-scale topographic maps are published in quadrangle or county format.

Beginning in FY 1984 and continuing through FY 1986, emphasis in the 1:100,000-scale program has shifted from topographic editions of quadrangle maps to primarily the production of planimetric bases. This shift is providing the bases needed to generate digital cartographic data for the 1990 Decennial Census of Population and will result in the completion of planimetric bases for the conterminous United States by the end of FY 1986. Once this need is met emphasis will return to topographic edition production. A national series of topographic quadrangle base maps at the 1:100,000 scale for use as a comprehensive source of base cartographic information as required by many Federal and State agencies is projected for first half of the next decade. Preparation of topographic editions will be emphasized following completion of the planimetric editions.

Priority requirements, established by the needs identified to the Geological Survey through coordination meetings and responses to annual OMB Circular A-16 requests include:

- Bureau of the Census requires digitized planimetric base data categories of transportation and drainage at 1:100,000-scale by mid-FY 1987 in support of a geographic information system for the 1990 Decennial Census. Fulfillment of this requirement necessitated increased emphasis on completion of planimetric editions for the remaining 1:100,000-scale maps covering the conterminous United States. The requirement for digital cartographic data is being fulfilled under the Digital Cartography Program.
- The Bureau of Land Management in implementing the Federal Land Policy and Management Act of 1976, is using 1:100,000-scale intermediate-scale topographic maps as a base for range and timber planning and more significantly as a base for identifying surface and subsurface ownership of mineral lands for management activities.
- The Soil Conservation Service uses intermediate-scale planimetric maps to display resource data over 1.5 billion acres (about 2/3 of the United States) of non-Federal land.
- Geological Survey makes extensive use of intermediate-scale topographic base maps in its Coal Resources Program and for ground water and river basin studies.
- Fish and Wildlife Service (F&WS) is conducting a National Wetlands Inventory (NWI). Planimetric base maps for the NWI are 1:100,000-scale quadrangle maps and coverage of the conterminous United States is needed. The F&WS has a second requirement for intermediate-scale topographic maps for studies of the nation's coastal ecosystems.
- Minerals Management Service requires intermediate-scale topographic maps for offshore leasing and management activities.
- Tennessee Valley Authority uses intermediate-scale topographic maps for its nuclear power plant emergency evacuation plans.
- Ten States are participating in joint-funding agreements for intermediate-scale map coverage for mineral management and other multipurpose planning uses.

Selected program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
Intermediate-Scale Maps----------	379	330	330	185

Unit costs range from approximately $10 per square mile to approximately $25 per square mile for intermediate scale mapping. Factors influencing unit costs include format, size, and scale of map, complexity of features, extent of updating required, and whether the map is planimetric or topographic.

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	5,541	4,091	-1,450
(FTE)	(128)	(123)	(-5)

This reduction in funding will defer completion of topographic versions of the 1:100,000-scale series maps by three years until the mid-1990's. Additionally, the initial effort toward revision of these maps and the addition of bathymetric data to selected maps will be deferred. Production of 1:100,000-scale maps will be reduced by about 30 maps to 120 per year. The result of these delays is lengthened response time to requests from other Federal agencies.

Distribution of change by object class:

The object class detail for the proposed $1,450,000 decrease is as follows:

	FTE-T	Amount
Personnel Compensation	-5	$ 146,000
Personnel Benefits		19,000
Travel and Transportation of Persons		15,000
Transportation of Things		10,000
Communications, Utilities and Other charges		80,000
Printing and Reproduction		10,000
Other Services		950,000
Supplies and Materials		170,000
Equipment		50,000
Total		$ 1,450,000

Small-Scale and Other Special Mapping

Objectives: To prepare and revise a variety of multipurpose base maps at various scales to meet the needs of natural resource agencies, Congress, and national interests requiring maps that show large geographic areas on a single map; and to prepare special map products to meet unique, and often unanticipated requirements of Federal and State agencies.

Base Program:

1:250,000-Scale Maps: There are 631 published maps in this series providing complete coverage of the conterminous United States, Hawaii, and Alaska. Over half of these maps are in need of revision.

This program responds to requirements of the Defense Mapping Agency to support their 1:250,000-scale Joint Operations Graphic (air and ground) Program; and includes a joint mapping effort with the National Ocean Service of NOAA for the preparation of topographic/bathymetric 1:250,000-scale maps of coastal areas to provide support for the management of the coastal zone and the administration of the Outer Continental Shelf (OCS) under the OCS Lands Act Amendment of 1978.

National Park Maps: The Geological Survey, in coordination with the National Park Service, prepares new maps of park areas and revises existing maps. These maps support National Park management and are for sale to park visitors and the general public.

U.S. and State Base Maps: These maps are used by the Federal, State and local agencies, educational institutions, and the general public. Federal and State agencies are requesting revision of these bases for their use in accurately depicting thematic information.

Special Maps: Special map products are prepared from existing map bases and information collected from various sources, some of which are provided by the requesting organization. Special maps produced for government programs often have the added benefits for commercial users such as public utility companies, and the general public. Requests for special map products and services are numerous within any one fiscal year. A variety of small-scale reference and thematic maps, and related products are also prepared to meet the expressed needs of Congress and of analysts and policymakers in Federal, State, and regional agencies, as well as in the scientific community, and academia. These maps and related products contain a wide variety of thematic earth science and other information in an automated system from which users can create hard copy and visual references to meet unique needs.

EXAMPLES OF SPECIAL MAPPING ACTIVITY

Product/Service	User/Uses
Preparation of maps and cartographic data for Mt. St. Helens and vicinity including Digital Elevation Models	Prepared in cooperation with other Federal agencies and offices and the State of Washington for use in hazard mitigation studies.
Preparation of maps on petroleum resources of the Western States	Provide information to Federal, State and local governments and the general public on critical environmental and natural resource issues.
Preparation of Coastal Barrier maps of the Atlantic, Gulf and Great Lakes coastal regions.	For general use in studies of the coastal zone to support the Coastal Barrier Act.
Preparation of experimental image maps from Landsat sensors.	To evaluate the potential of Landsat data for the preparation of multispectral image maps for general use.
Preparation of small scale thematic separates.	Federal, State, and local governments, libraries and the general public for planning, research and preparation of other maps.

Selected program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
1:250,000-Scale Maps-------------------	22	30	30	30
National Park Maps---------------------	2	2	2	2
U.S. and State Base Maps---------------	8	2	2	2
Special Maps---------------------------	50	50	50	25

The major effort of the Small-Scale and Other Special Mapping Program is the revision of 1:250,000-scale maps. The estimated unit cost for revising 1:250,000-scale maps is less than $4 per square mile. The area covered by a 1:250,000-scale map averages about 7,200 square miles in the conterminous United States and about 6,200 square miles in Alaska.

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	2,125	1,550	-575
(FTE)	(61)	(59)	(-2)

This reduction in funding will result in a decrease by nearly one half of the number of special map products prepared through direct funding. The Geological Survey, however, will continue to respond to special map needs of other Federal agencies on a reimbursable basis. Remaining resources will continue to be directed toward maintenance of State base maps and revision of 1:250,000-scale series maps, especially in Alaska in support of Federal land management responsibilities.

Distribution of change by object class:

The object class detail for the proposed $575,000 decrease is as follows:

	FTE-T	Amount
Personnel Compensation	-2	$ 57,000
Personnel Benefits		8,000
Travel and Transportation of Persons		10,000
Transportation of Things		5,000
Communications, Utilities and Other charges		35,000
Printing and Reproduction		10,000
Other Services		350,000
Supplies and Materials		75,000
Equipment		25,000
Total		$ 575,000

Federal Land Information

Objectives: To provide, through a computerized data base and by using existing geographic information system (GIS) technology, information essential to the formulation of policy on Federal lands.

Base Program: The Federal Land Information Program addresses the increasing need to rapidly and effectively answer questions on such spatially related data as location of federally owned lands, the agencies administering them, Federal mineral rights, mineral occurrence, and the nature of restrictions on development on these lands. Immediate applications research designed to establish a Federal focus on GIS was initiated in FY 1986 and will continue in FY 1987. This research involves developing techniques to integrate Federal and other earth science digital data, exchanging data, and conducting demonstration projects with other Federal and State agencies. A variety of land and resource data exists, but these data are in a diversity of formats. GIS research being conducted by the Geological Survey is designed to develop the capability of bringing these data together for computer based analysis. In FY 1983 the Geological Survey, in cooperation with the Bureau of Land Management (BLM), completed a pilot project on the Medford, Oregon, 1:250,000-scale quadrangle area to demonstrate GIS technology and capability of a Federal Land Information System (FLIS). Data were obtained primarily from the Surface-Minerals Management Status maps compiled by BLM and from the Mineral Resources Data System (MRDS), the Conterminous United States Mineral Assessment Program (CUSMAP), and the National Mapping Program of the Geological Survey. During FY 1984 the Geological Survey began working with BLM on their Automated Land and Mineral Records System (ALMRS) to begin defining the capability to use GIS technology and to merge BLM data with other spatial earth science data into a larger, more comprehensive system. The Geological Survey initiated a second pilot project on the Silver City, New Mexico-Arizona, 1:250,000-scale quadrangle to further demonstrate GIS technology.

Data collection for the development of a FLIS for Alaska began in FY 1984 focusing on 20 1:250,000-scale quadrangles around Anchorage. Alaska was chosen because of the existence of several data bases (Alaska Mineral Resource Assessment Program (AMRAP), Alaska Automated Land Records System (AALRS), etc.) from which data could be obtained. The primary data categories are Federal surface and subsurface ownership, mineral occurrence, and restrictions to mineral development. Data such as roads, railroads, and streams and water bodies also are included. Thematic data such as land use and land cover, drainage basins, and digital elevation models, may be added at a later date.

In FY 1985, work continued in Alaska with the addition of more detailed earth science data from selected AMRAP quadrangles, mine information from MRDS, and land ownership data from BLM's AALRS data base. By the end of FY 1985, statewide land ownership, mineral rights, withdrawals and regional mineral assessments were included. Graphic and tabular products were made. Also the American Petroleum Institute maps (1:1,000,000-scale) of Federal ownership covering most of the U.S. were digitized. The new FLIS program continued the Silver City project by incorporating minerals data from the USGS Silver City CUSMAP, and land status data from the BLM Surface-Minerals Management Status maps. The data were entered in a GIS format and merged with base cartographic data to produce graphic and tabular products.

Other efforts in FY 1986 include continuing cooperative efforts between FLIS and the Bureau of Mines' Inventory of Land Use Restraint Program (ILURP), adding more detailed mineral resources data for Alaska, and accelerating the inclusion of Geological Survey Western United States earth science data into FLIS.

FLIS will use analytical and display capabilities based on current GIS technology, but will not be limited to the particular characteristics of a specific or single GIS. FLIS is being designed to incorporate Federal land ownership and restrictions data with mineral resources and other earth science and cartographic data on all Federal lands. FLIS will provide a unique set of information to develop and examine policy issues related to public land.

Image Mapping

Objectives: To provide photoimage map products meeting National Map Accuracy Standards, primarily orthophotoquads, in response to specific, identified requirements of State and Federal agencies particularly the Bureau of Land Management, Soil Conservation Service, Forest Service, and the Customs Service.

Base Program: Orthophotoquads, produced from aerial photographs, are photoimage maps meeting National Map Accuracy Standards. The Geological Survey produces orthophotoquads in the 7.5-minute quadrangle format (15-minute quadrangle format in Alaska) in response to specific requests submitted by many government agencies. The Bureau of Land Management uses orthophotos over selected areas in Alaska to support their work under the Alaska Native Claims Settlement Act of 1971 and the Alaska National Interest Lands Conservation Act of 1980.

Other examples of orthophotoquad requirements include: the Environmental Protection Agency for the Chesapeake Bay Program; the Bureau of Land Management for land and resource management; the Soil Conservation Service for soil classification; and the Forest Service for land and timber management. State governments also use these image products to aid in coastal area programs and local government planning and management activities. Color orthophotoquads are being published under a January 1985 joint-funding agreement with the State of North Carolina to assist in its coastal area and wetlands management programs. Also, under a joint program with the Customs Service and the International Boundary and Water Commission, the Geological Survey is producing simulated natural color orthophotoquads along the United States-Mexico border.

Selected program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
Orthophotoquads (7.5-minute units)--	1,481	2,250	2,250	1,900

Orthophotoquads in the conterminous United States are prepared on a 7.5-minute quadrangle format, each covering about 57 square miles, at a unit cost of about $30 per square mile. Orthophotos in Alaska are prepared on a 15-minute quadrangle format, each covering about 200 square miles, at a unit cost of about $15 per square mile.

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	3,951	(3,376)	-575
(FTE)	(96)	(95)	(-1)

This reduction in funding will defer preparation of orthophotoquads in response to requirements of other Federal and State agencies such as the Soil Conservation Service. Production will be reduced about 15 percent to about 1,900.

Distribution of change by object class:

The object class detail for the proposed $575,000 decrease is as follows:

	FTE-T	Amount
Personnel Compensation	-1	$ 27,000
Personnel Benefits		3,000
Travel and Transportation of Persons		10,000
Transportation of Things		5,000
Communications, Utilities and Other charges		35,000
Printing and Reproduction		10,000
Other Services		400,000
Supplies and Materials		55,000
Equipment		30,000
Total		$ 575,000

Land-Use and Land-Cover Mapping

Objectives: To produce land-use and land-cover maps and digital data for public release at 1:250,000 scale nationwide and at 1:100,000 scale for selected areas; to produce statistical summaries of land-use and land-cover patterns. Special emphasis is being given to areas of critical national concern such as coastal areas, mineral and energy resource areas, metropolitan areas, and areas impacted by the effects of acid rain; and to assist State cooperators in developing State land-use and land-cover data bases.

Base Program: The Land-Use and Land-Cover Mapping program provides the only systematic inventory of land-use and land-cover data that is nationwide in scope and features a uniform classification system portrayed at standardized scales. The program provides maps and data for numerous Federal, State, and private sector activities related to land resource inventory, planning, and development.

Land-use and land-cover maps and the associated map sets, which depict political units, hydrologic units, census county subdivisions, and, when requested by State cooperators, areas of Federal and State land ownership are produced and made available through the Geological Survey's Open File. Selected land-use and land-cover maps are also available in published form. Over four hundred land-use and land-cover maps, covering a total of 3.0 million square miles (total lower 48 states), are available to the public or are in work.

The National Oceanic and Atmospheric Administration (NOAA) uses digital land-use and land-cover data for its National Coastal Pollutant Discharge Inventory (NCPDI) program. Under this program, NOAA has used digital land-use and land-cover data to study non-point sources of pollutant discharges along the Gulf of Mexico coastline and is preparing to implement use of the program along the East Coast. Recently, NOAA requested that the Geological Survey expedite production of digital land-use and land-cover data for the West Coast, so the NCPDI program can be used to assess pollutant discharges along that coastline.

Sixteen States have entered into joint funding agreements with the Geological Survey to expedite land-use and land-cover mapping in those States. The Geological Survey has revised the initial land-use and land-cover maps and digital data for Louisiana. Other revision requests from States are being evaluated.

During FY 1984 the U.S. Geological Survey, in cooperation with the Committee on National Resources Information Management (CONRIM) in Alaska, developed a special uniform classification system for Alaska to be used with Landsat data. Major efforts have been made in FY 1985 and FY 1986 to produce Landsat-derived land-use and land-cover mapping and statistical data for Alaska in this format. In addition to the production of Landsat-derived data for Alaska, a maintenance program will be initiated to revise land-use and land-cover maps in States with cooperative programs and in areas of critical national concern.

In FY 1987 emphasis will be focused on preparation of land-use and land-cover data in Alaska, on production of digital data for the conterminous U.S., and on maintenance of conterminous U.S. land-use and land-cover maps in selected areas.

The open file land-use and land-cover and associated map sets are digitized and these data are stored on magnetic tape. A geographic information system has been developed for producing land-use and land-cover statistical summaries. These summaries tabulate land-use and land-cover categories for the areas shown on the associated maps. Digital data and summaries have a diversity of uses, including the Environmental Protection Agency's use of the data to study pollution sources in U.S. coastal areas, Department of Interior's Acid Rain Task Force use of the data to develop models to determine the effects of acid rain on building materials in urban areas, and the Soil Conservation Service's use of the data for the National Resources Inventory. This phase of the Land-Use and Land-Cover Mapping program will continue beyond the planned completion date for the graphic products.

Selected program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
Land-Use and Land-Cover Mapping (square miles)				
Graphic data	270,000	180,000	180,000	180,000
Digital data	260,000	220,000	220,000	220,000

Unit costs for land-use and land-cover graphic data production varies from $4 per square mile at 1:250,000-scale to $5 per square mile at 1:100,000-scale. Digital data of land-use and land-cover categories at 1:250,000 scale costs approximately $3 to $4 per square mile.

EXAMPLES OF LAND-USE AND LAND-COVER DATA APPLICATIONS

User	Application
National Oceanic and Atmospheric Administration-Environmental Protection Agency	Digital data used to study pollution sources in U.S. coastal areas.
Fish and Wildlife Service--Minerals Management Service	Landsat-derived land cover map used in Environmental Impact Study of Arctic National Wildlife Refuge, Alaska, prior to geologic exploration.
Soil Conservation Service	Maps used by district conservationists in acquiring county base data for the National Resources Inventory. Data also to be used in the periodic Resources Conservation Act appraisal.
Economics and Statistics Service, U.S. Department of Agriculture	Maps and statistical summaries used in 5-year assessments of trends and changes in the United States land-use patterns.
Nuclear Regulatory Commission	Maps and statistics applied to siting analysis and disaster planning.
Bureau of Land Management	Land-use and land-cover data provided for NPR-Alaska areas used for land resource assessment and management purposes.
Other Interior/Geological Survey	Assessments of lands suitable for mineral development and in acid rain related studies.
Non-Federal	Data for building site selection, utility corridor studies, development potential surveys, terrain simulations, and many other land related activities are used by engineering and consulting firms, utility companies, and land development companies.

[illegible]

Justification of Program and Performance

Activity: National Mapping, Geography, and Surveys
Subactivity: Advanced Cartographic Systems

(Dollar amounts in thousands)

Program Elements		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Advanced Cartographic Systems	$	[illegible]		[illegible]	[illegible]	[illegible]
	(FTE)	[illegible]		[illegible]	[illegible]	[illegible]
Total Requirements	$	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	(FTE)	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

[illegible]

Authorization

[illegible]

[illegible]

[illegible]

Advanced Cartographic Systems

Objectives: To develop next generation system capability and integrate state-of-the-art technology into Geological Survey programs. This system will enhance and expand the capability to produce map products in graphic and digital form through the acquisition and development of technologically advanced, computer-oriented cartographic systems. More specific objectives are to develop and implement:

- A capability for mass conversion of graphic cartographic data to digital cartographic data.
- The capability to exploit all known cartographic quality remote sensors for mapping and for digital cartographic data production using digital methods.
- Data management procedures, equipment and storage media adequate for operation of a National Digital Cartographic Data Base (NDCDB) and associated supporting data bases and files.
- The capability to use NDCDB materials to produce all National Mapping Program products.

Base Program: The Geological Survey continues with the program of replacing outmoded analog, graphic mapping equipment with hardware and software systems capable of producing digital and graphic cartographic data. The digitizing equipment will be used to collect elevation, boundary, land net, transportation, hydrography, and other cartographic data in digital form to meet Federal and State agencies' requirements.

The Geological Survey will continue to install more digitizing and interactive digital data editing systems and upgrade existing digitizing and editing systems in support of the expanding digital cartographic effort. These systems are used to edit digital cartographic data prior to entering the data in the NDCDB.

The Geological Survey has initiated an Advanced Cartographic Systems program to implement new mapping technologies. In FY 1986 $2.5 million was appropriated for acquisition of equipment and for software development for an advanced system. The FY 1987 program will provide for the continued development and implementation of new technology and the adaptation of existing Geological Survey data collection systems for use with classified source materials. Parallel efforts will also be made in data storage and product generation capabilities during the initial phase.

As lead domestic mapping agency for the Federal Government, the Geological Survey is the focal point for classified civil cartographic, geographic, and remotely sensed data requirements. Through the Advanced Cartographic Systems program, the Geological Survey will continue to provide civil agencies access to classified source materials from which they would otherwise be deprived; satisfy Federal, State, and local agencies' growing requirements for digital cartographic data more effectively; and increase the efficiency of digital cartographic data production.

Increase for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	7,406	12,206	+4,800
(FTE-T)	(3)	(3)	(0)

The Advanced Cartographic Systems initiative was proposed for increased funding beginning in FY 1986 as a multiyear effort to procure sophisticated equipment and to develop advanced software required to take advantage of developing Department of Defense (DoD) technology. When in place the system will significantly increase capability to produce and apply digital cartographic data. These advancements, when merged with new generation equipment, such as mass data storage units, more powerful computers, improved data management systems, interactive computer graphic devices, and data processing systems will have a greater impact on the science of cartography than any advancement in the last 40 years. Through this system the Geological Survey will continue to fulfill its lead civilian agency responsibility to provide other agencies with the timely cartographic and geographic information required to support their programs, and to provide them access to the advanced technology. Development of the state-of-the-art system for generation and revision of cartographic products will require a substantial investment over the next few years.

This proposed increase represents the second year of a multiyear effort and will provide funds needed to continue the initiative to automate the Geological Survey's mapping process. More specifically, these funds will be used to further adapt existing cartographic systems using developing DoD technology. In FY 1987 the $4.8 million is planned to be used for software development and equipment procurement and installation.

Distribution of change by object class

The object class detail for the proposed $4,800,000 increase is as follows:

	Amount
Travel and Transportation of Persons	$ 6,000
Communications, Utilities and Misc. Charges	4,000
Other Services	1,800,000
Supplies and Materials	40,000
Equipment	2,950,000
Total	$ 4,800,000

Justification of Program and Performance

Activity: National Mapping, Geography, and Surveys
Subactivity: Earth Resources Observation Systems (EROS)

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Data Production and Dissemination	$	4556		4566	4566	0
	FTE-T	29		29	29	0
Applications and Research	$	4812		4822	4322	-500
	FTE-T	43		43	43	0
Total Requirements	$	9368	8965	9388	8888	-500
	FTE-T	72	72	72	72	0

Gramm-Rudman-Hollings Impact:

FY 1987 Enacted	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
9368	-403	8965

This reduction in funding advances a planned reduction in applications research by deferring lower priority applications, development, and research activities.

Authorization

43 U.S.C. 31 *et. seq.*	*Director of Geological Survey - Establishment of office*. This section provides, among other things, that the Geological Survey is authorized to classify the public lands and examine the geological structure, mineral resources, and products within and outside of the national domain.
43 U.S.C. 45	*Production and sale of copies of photographs and records*. This section authorizes the Geological Survey to produce and sell on a reimbursable basis copies of aerial or other photographs, mosaics, and other official records.

43 U.S.C. 1318	Geological Survey: classes and sizes of publications. This section requires that publications of the Geological Survey shall include maps, folios, and atlases required by law. This Section further provides for printing and reprinting of Geological Survey reports and distribution to Congress and the Library of Congress.

Not listed are statutes that authorize the Geological Survey to produce maps and data in support of other Federal agencies' programs.

Data Production and Dissemination

Objectives: To archive, produce, and distribute to Government and public users, high-quality remotely sensed data including aerial photographs and space images and to produce and distribute digital cartographic and earth-science data sets and products.

Base Program: Under this program, remotely sensed data including aerial photographs and satellite images (both photographic and digital) are produced, archived, and distributed in response to user requests. These data are used by Federal, State, and local government scientists and managers to address a variety of earth science issues. The largest users of the data are Federal and State agencies and others involved with the exploration, assessment, mapping, and monitoring of energy, minerals, and renewable resources.

The EROS Data Center serves as the repository and public distribution location for a continuously growing archive of over 5,800,000 aerial photographs. These photographs acquired by the Geological Survey, the National High-Altitude Photography (NHAP) program, the National Aeronautics and Space Administration (NASA), and other Federal agencies, serve as the basis for various mapping applications, resource and environmental management, crop studies, soils evaluation, and other activities. Images from Side-Looking Airborne Radar (SLAR) and NASA's Large Format Camera are also archived and distributed.

The EROS Data Center provides, on a cost-reimbursable basis from the National Oceanic and Atmospheric Administration (NOAA) and in cooperation with Earth Observation Satellite Company (EOSAT), the commercial Landsat system operator, final ground processing, archiving, product generation, and public distribution of data from the U.S. Civil Land Remote Sensing Satellite Program--Landsat. The growing Landsat archive includes over 2,300,000 satellite image frames. These data are the baseline data set for inclusion in the historical Land Remote Sensing Satellite Data archive required by P.L. 98-365.

Major cost efficiencies and user advantages result from archiving and distributing satellite data and aerial photographs at one facility. This centralization results in savings from shared overhead, staff, computer networks and systems, archives, and processing equipment.

This program also produces and distributes specialized image map products. Improved data processing techniques are used to make image maps which are tailored to specific scales and areas, making them compatible with existing map bases. These image maps are used to update existing maps and can incorporate traditional printed map data with a satellite- or aircraft-acquired image.

In addition, digital earth-science data sets such as the National Uranium Resources Evaluation (NURE) data are archived, processed, and distributed from the EROS Data Center as part of its program. A variety of other digital cartographic data products needed by Federal and State agencies, including derivative products from the National Digital Cartographic Data Base, are produced and distributed on a reimbursable basis.

Selected program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
Image Frames Processed and Archived	591,000[1]	360,000	360,000	360,000
Digital Scenes Processed and Archived	47,000	47,000	47,000	47,000
Image Frames Processed and Distributed	229,000	229,000	229,000	229,000
Digital Products Processed and Distributed	6,700	6,700	6,700	6,700

[1] This figure represents archiving of special collections of aerial photographs from NASA and the Scientific Committee on Antarctic Research (SCAR).

Digital scenes production is supported primarily by NOAA reimbursable funding.

Applications and Research

Objectives: To conduct research and cooperative applications development projects leading to new and improved cost-effective remote sensing and spatial data applications, to develop advanced information systems using diverse earth science data sets, including remotely sensed data, and to provide leadership and coordination of departmental activities in developing and using remote sensing technology. Training is also provided, on a reimbursable basis, in techniques for analysis and merging of different earth science and image data sets.

Base Program: The Earth Resources Observation Systems (EROS) Program was established in 1966 to apply remote sensing techniques to the inventorying, monitoring, and management of natural resources. One of its primary objectives is to conduct research and support other Bureaus of the Department and other Federal agencies in the interpretation, application, and merging of remotely sensed data with other traditional earth science data sets to develop advanced spatial data information systems. The program also provides public domain access to this technology through reports and sale of specialized data sets.

Continuing activities include geographic information systems development through cooperative applications projects and research. Applications projects and research are conducted to develop improved cost-efficient techniques for using remotely sensed data (satellite and aircraft) and for merging these data with other traditional earth science data sets to build information systems for natural resource management.

Congress, in the Land Remote-Sensing Commercialization Act of 1984, authorized and encouraged the Department of the Interior to conduct programs of research and development in the applications of remote sensing. The Geological Survey's EROS Data Center was cited by the Senate Committee on Commerce, Science, and Transportation in its report accompanying the bill to have an "excellent national and international reputation as a leader in conducting research in developing applications of satellite remote sensing. The Committee expects the EROS Data Center to continue and to enhance the activities for monitoring the Earth and its environment." A memorandum of understanding is being developed with NOAA which includes, as a major part of this effort, the establishment of a collocated Federal research and development program at the EROS Data Center, in which research scientists from NOAA, other Federal agencies, universities, and private industry will have access to the data archives and analysis equipment to support their research.

Selected program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
Training Courses and Workshops	18	18	18	18
Applications Development Projects (Cooperative)	12	12	12	10

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	4,822	4,322	-500
(FTE)	(43)	(43)	(0)

This reduction in funding will defer lower priority applications, development, and research activities in favor of higher priority projects especially those cooperatively or reimbursably funded. Approximately 10 contract scientists and support personnel involved in applications and research activities would not be funded.

Distribution of change by object class:

The object class detail for the proposed $500,000 decrease is a s follows:

	Amount
Travel and Transportation of Persons	$ 20,000
Comm., utilities & other charges	5,000
Other Services	280,000
Supplies and Materials	20,000
Equipment	175,000
Total	$ 500,000

Justification of Program and Performance

Activity: National Mapping, Geography, and Surveys
Subactivity: Cartographic and Geographic Information

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Cartographic and Geographic Information	$	3522		3620	3620	0
	FTE-T	101		101	101	0
Total Requirements	$	3522	3371	3620	3620	0
	FTE-T	101	101	101	101	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
3522	-151	3371

This reduction will impact the distribution of earth science data by diminishing the extent of information searches.

Authorization

31 U.S.C. 97	Fees and Charges for Government Services and Things of Value. This section directs that each service or thing of value provided to a person be self sustaining to the extent possible. Further, the head of each agency may prescribe regulations establishing the charge for each service or thing of value. Each charge is to be fair, based on the costs to the Government or the value of the service or thing to the recipient, public policy or interest served, and other relevant facts.
43 U.S.C. 31 et. seq.	Director of Geological Survey - Establishment of office. This section provides, among other things, that the Geological Survey is authorized to classify the public lands and examine the geological structure, mineral resources, and products within and outside of the national domain.

43 U.S.C. 41	Publications and reports; preparation and sale. This section provides that the publications of the Geological Survey shall consist of geological and economic maps illustrating the resources and classification of lands and other reports.
43 U.S.C. 42	Distribution of maps and atlases, etc. This section authorizes and directs the Director of the Geological Survey, upon the approval of the Secretary of the Interior, to dispose of the topographic and geologic maps and atlases of the United States. The prices and regulations are to be fixed by the Director with the approval of the Secretary. This Section further provides that copies of each map or atlas, not to exceed five hundred, shall be distributed gratuitiously among foreign governments, departments of our own Government, literary and scientific associations, and to educational institutions or libraries.
43 U.S.C. 43	Copies to Senators, Representatives and Delegates. This section provides that one copy of each map and atlas shall be sent to each Senator, Representative, and Delegate in Congress, if published within his term, and that a second copy be placed at the disposal of each.
43 U.S.C. 44	Sale of transfers or copies of data. This section provides that the Geological Survey may furnish copies of maps to any person, concern, institution, State or foreign government.
43 U.S.C. 45	Production and sale of copies of photographs and records. This section authorizes the Geological Survey to produce and sell on a reimbursable basis copies of aerial or other photographs, mosaics, and other official records.
43 U.S.C. 1318	Geological Survey: classes and sizes of publications. This section requires that publications of the Geological Survey shall include maps, folios, and atlases required by law. This Section further provides for printing and reprinting of Geological Survey reports and distribution to Congress and Library of Congress.

Cartographic and Geographic Information

Objectives: To operate a national clearinghouse which collects, analyzes, and disseminates information about the domestic cartographic and geographic data and products of Federal and State agencies and private sector organizations; and to disseminate water resources, geologic, and general earth science information and data generated by the Geological Survey. Also, to establish and implement policies for product distribution activities, including product pricing, sales forecasting and analysis, and marketing of U.S. Geological Survey products including maps, digital cartographic data, aerial photographs, and mapping byproducts.

Base Program: The Cartographic and Geographic Information Program, in its role as a national clearinghouse for cartographic and geographic products and data, has become the central focus of an integrated public data network. The operation of such a central facility, known as the National Cartographic Information Center, is consistent with the objectives of OMB Circular A-16. Through this program the Geological Survey gathers, reviews, indexes, and catalogs information about the Nation's cartographic and geographic products thus minimizing duplication while assisting Federal, State, and private agencies in planning for and acquiring the specialized products needed for their programs.

To handle the rising number of cartographic and geographic requests in a timely manner as well as to acquire assistance in handling the large volume of data to be cataloged, the Geological Survey has enlisted the assistance of State governments through its State Affiliate Program. The Geological Survey currently has affiliate agreements with 40 States and is continually expanding the program. The affiliates provide information services on a local basis using their own facilities and employees. The Geological Survey provides the State offices with initial informational data files, i.e., catalogs, index microfiche, computer output microfilm and updates to these files as required.

The Geological Survey operates a network of Public Inquiries Offices which respond to multidisciplinary inquiries. These offices are located in: Anchorage, Alaska; Dallas, Texas; Denver, Colorado; Los Angeles, California; Reston, Virginia; Salt Lake City, Utah; San Francisco and Menlo Park, California; Spokane, Washington; and Washington, D.C. Each office is a sales outlet for Geological Survey topographic and thematic maps, as well as earth-science publications and reports.

The Cartographic and Geographic Information program has responsibility for developing recommended prices of Geological Survey products, forecasting and analyzing sales data, planning revenue enhancement activities including public service announcement campaigns and marketing programs to increase consumer awareness and use of the products. This program, additionally, produces the indexes, informational literature, and exhibits describing the products and related activities for the National Mapping Program. This program also directs the Federal Map Depository Library Program and formulates map depository and other policies relating to the distribution of Geological Survey products.

Activities within this program involve such operations as sales analysis, economic modeling, and price forecasting; the design and production of status maps and indexes of products and mapping programs, and the research, analysis, and dissemination of complex earth science, cartographic and geographic data rather than the production of a product that can be measured by unit cost. An example is the processing of information inquiries. Inquiries often involve the ordering and distribution of Geological Survey data as well as the research for and dissemination of information about cartographic and geographic data held by the Geological Survey and other agencies.

Selected program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Base	FY 1987 Estimate
Information Inquiries---------------	650,000	650,000	650,000	650,000
Maps and Charts (public and private holdings) indexed in Data Bases --	235,000	240,000	250,000	250,000
Aerial and Space Images (public and private holdings) indexed in the Data Base ------------------------	15,750,000	16,250,000	16,500,000	16,500,000
Map and Book Titles (Geological Survey) in inventory--	72,000	73,000	74,000	74,000

Justification of Program and Performance

Activity: National Mapping, Geography, and Surveys
Subactivity: Side-Looking Airborne Radar

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Side-Looking Airborne Radar	$	1988		1988	0	-1988
	FTE-T	0		0	0	0
Total Requirements	$	1988	1901	1988	0	-1988
	FTE-T	0	0	0	0	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
1988	-87	1901

This reduction will effect both SLAR data acquisition and research addressing the applications of SLAR. Specifically, project areas recommended by State geologists and Federal scientists totaling an area of approximately 12,000 square miles will not be acquired, and one research project using SLAR for the improved understanding of Geologic structure will not be funded.

Authorization

43 U.S.C. 31 et. seq	Director of Geological Survey - Establishment of office. This section provides, among other things, that the Geological Survey is authorized to classify the public lands and examine the geological structure, mineral resources, and products within and outside of the national domain.
43 U.S.C. 45	Production and sale of copies of photographs and records. This section authorizes the Geological Survey to produce and sell on a reimbursable basis copies of aerial or other photographs, mosaics, and other official records.

Side-Looking Airborne Radar (SLAR)

Objectives: To acquire, distribute, and use Side-Looking Airborne Radar (SLAR) data for resource assessment; these objectives are accomplished by:

- Acquiring and archiving SLAR data for the public domain.
- Producing and distributing high quality SLAR data for use by both private sector and government scientists and managers.
- Using SLAR data for geologic, hydrologic, cartographic, and engineering applications.

Base Program: The Side-Looking Airborne Radar (SLAR) program was initiated during FY 1980. Since its inception, the Geological Survey has acquired, and entered into the public domain, SLAR data of areas within both the conterminous United States and Alaska. These areas were chosen by Geological Survey scientists after extensive review, including soliciting high priority acquisition sites from State Geological Surveys. These areas usually have high potential for energy and mineral resources.

The Geological Survey increased its efforts in FY 1985 to promote and market the SLAR data currently in the public domain by presenting technical reports at scientific symposia, publishing the results of SLAR investigations, preparing display panels for exhibit at professional conventions, publishing and distributing SLAR order forms and brochures describing data availability, and producing experimental image maps from SLAR data as an inexpensive means of introducing this data to earth scientists.

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	1,988	0	-1,988
(FTE-T)	(--)	(--)	(--)

The SLAR technology has demonstrated value for certain applications. Sufficient SLAR data have been acquired and made available to the public to demonstrate their utility. In view of the significant funding required for additional SLAR data acquisition in competition with other high priority Geological Survey programs, no FY 1987 funds are requested. Additional SLAR data can be readily acquired by industry within the private sector without the expenditure of government funds.

Distribution of change by object class

The object class detail for the proposed $1,988,000 decrease is as follows:

	Amount
Printing and Reproduction	$ 20,000
Other Services	1,948,000
Supplies and Materials	20,000
Total	$ 1,988,000

U.S. GEOLOGICAL SURVEY
Analysis by Subactivity

Activity: Geologic and Mineral Resource Surveys and Mapping

(Dollars in thousands)

Subactivity	FY 1985 Actual B.A.	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase or Decrease (-) 1987 Est. over 87 Base
Geologic Research Surveys	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Land Resource Surveys	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Mineral Resource Surveys	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Energy Geologic Surveys	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Offshore Geologic Surveys	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

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Geologic and Mineral Resource Surveys and Mapping
Subactivity/Element Change Crosswalk - FY 1987 Estimate
(Dollars in thousands)

Format of FY 1986 Congressional Budget	Amount 1987 Estimate
Geologic Hazards Surveys-No Change	46000
Land Resource Surveys-No Change	21483
Mineral Resource Surveys	42033
Alaska	9978
Conterminous States	6139
Wilderness Mineral Surveys	4090
Strategic/Critical Minerals	9231
Development of Assess. Techniques	12595
Energy Geologic Surveys	25072
Evolution of Sedimentary Basins	5052
Coal Investigations	6029
Onshore Oil & Gas Investigations	4638 b/
Oil Shale Investigations	559
Uranium/Thorium Investigations	3154
Geothermal Investigations	5141
World Energy Resource Assessment	499
Offshore Geologic Surveys-No Change	24428
Offshore Geologic Framework	24428
Coastal Erosion	0 c/
TOTAL	159016

Format of FY 1987 Congressional Budget	Amount 1987 Estimate
Geologic Hazards Surveys-No Change	46000
Land Resource Surveys-No Change	21483
Mineral Resource Surveys	42033
Nat'l Mineral Resource Assess. Program	20207 a/
Strategic/Critical Minerals	9231
Development of Assess. Techniques	12595
Energy Geologic Surveys	25072
Evolution of Sedimentary Basins	5052
Coal Investigations	6029
Oil & Gas Investigations	4638 b/
Oil Shale Investigations	559
Uranium/Thorium Investigations	3154
Geothermal Investigations	5141
World Energy Resource Assessment	499
Offshore Geologic Surveys-No Change	24428
Offshore Geologic Framework	24428
Coastal Erosion	0 c/
TOTAL	159016

a/ Alaska, Conterminous States, and Mineral Resources of Public Lands programs combined to form National Mineral Resource Assessment Program.

b/ Onshore Oil & Gas Investigations renamed Oil & Gas Investigations.

c/ New program element based on FY 1986 Congressional action.

Activity Overview

Activity: Geologic and Mineral Resource Surveys and Mapping

Program Missions and Objectives

Geologic processes and events that led to the composition and structure of the Earth affect every facet of our lives in one way or another by controlling the distribution and amount of energy, mineral, and land resources needed to support modern societies. In addition, some of these same processes, operating at present or in the recent past, are responsible for the geologic hazards that we are increasingly forced to cope with. Improving our understanding of the Earth, its composition, its structure, and the geologic processes that affect it, can lead to wiser, more intelligent use of our Nation's natural resources, and avoid or mitigate the impact of natural hazards connected with earth processes.

The basic mission of the Geologic and Mineral Resource Surveys and Mapping activity is to provide geologic, geochemical and geophysical information for other government agencies, and for the general public on land resources, on mineral and energy resources, and on geologic hazards of the Nation and its territories.

Extensive basic research is done continually on geologic processes and structure. Basic research is a major part of the programs and provides the capability needed to respond to emerging national problems. The programs are presented to Congress under five subactivities:

- Geologic Hazards Surveys are conducted to predict and delineate hazards from earthquakes, volcanoes, landslides, and other geologic hazards.

- Land Resource Surveys are conducted to: 1) acquire basic information on the Nation's geologic framework, including the deep continental crust, and the processes that have shaped it, 2) develop an understanding of climate change and its effects on land and water resources, and 3) measure changes in the strength and direction of the Earth's magnetic field. Research projects of mutual interest to both Federal and State governments are conducted under a special Federal/State Cooperative Program.

- Mineral Resource Surveys provide an assessment of the distribution, quantity and quality of the mineral resources of the United States by studying the geology of known mineral occurrences and potentially mineralized areas, by inventing and improving exploration techniques and mineral occurrence models necessary for the development of comprehensive information on domestic and world resources of nonfuel minerals that are essential to a strong national economy and defense. Particular emphasis is placed on strategic and critical minerals and the assessment of the mineral potential of public lands as a major consideration in management and Wilderness determinations.

- Energy Geologic Surveys provide timely and credible assessments of the distribution, quantity, and quality of the Nation's coal, oil and gas, oil shale, uranium and thorium, and geothermal resources for the development of national energy policy (particularly with respect to public lands), and to enhance industry's capabilities (especially among independent oil producers) to explore for, and ultimately develop, new sources of energy, principally oil and gas.

o Offshore Geologic Surveys conduct, on a regional basis, scientific investigations aimed at the systematic understanding and description of the geologic settings and conditions of the offshore areas of the United States by developing or extending our understanding of where mineral or petroleum resources occur and in what geologic framework such resources may exist. The program also assesses geologic conditions that may affect their future use and how their formation in oceanic areas can help in the search for analogous onshore deposits of economic significance. The program is generating basic geologic and resource information in the newly declared Exclusive Economic Zone.

In addition to maintaining the programs described above, funds appropriated to this activity provide for scientific and technical program management and support, including development and maintenance of ADP capability, a library system, and scientific laboratories.

Justification of Program and Performance

Activity: Geologic and Mineral Resource Surveys and Mapping
Subactivity: Geologic Hazards Surveys

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Earthquake Hazards Reduction	$	35875		36038	33275	-2763
	FTE-T	479		479	479	0
Volcano Hazards	$	10618		10667	10667	0
	FTE-T	116		116	116	0
Landslide Hazards	$	2982		2991	2058	-933
	FTE-T	43		43	43	0
Total Requirements	$	49475	47347	49696	46000	-3696
	FTE-T	638	638	638	638	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
49,475	-2,128	47,347

The $2,128,000 reduction to the Geologic Hazards Surveys subactivity will result in the following postponements or curtailments:

- The maintenance of seismic stations will be postponed; the completion of the earthquake hazard assessment of the Wasatch Front, Utah, will be delayed; geodetic surveys will be reduced; and design and prototype equipment development of a new National Seismographic Network to replace outdated seismographic networks in the United States will not be undertaken.

- Use of helicopters to monitor volcanic activity in Hawaii and at Mount St. Helens, Washington, will be reduced; all investigations of hydrologic implications of volcanic hazards will be conducted at a reduced level.

- Initiation of a landslide probability and risk assessment of the Wasatch Front, Utah, area will be postponed; development of a landslide experiment site in the Green Mountains of Vermont to monitor in real-time the development and failure of rock falls and rock slides will be recessed.

Authorization

43 U.S.C. 31(a)	The Organic Act of 1879 authorizes the Geological Survey to conduct "an examination of the geological structure, mineral resources, and products of the public domain."
42 U.S.C. 7701 *et*. *seq*. P.L. 95-124	The Earthquake Hazards Reduction Act of 1977 sets as a national goal the reduction in the risks of life and property from future earthquakes in the United States through the establishment and maintenance of a balanced earthquake program encompassing earthquake prediction, hazard reduction, and research.
42 U.S.C 5201 *et* *seq*. P.L. 93-288	The Disaster Relief Act of 1974, Section 202(a), states that "The President shall insure that all appropriate Federal agencies are prepared to issue warnings of disasters to State and local officials." In addition, Section 202(b) states that "The President shall direct appropriate Federal agencies to provide technical assistance to State and local governments to insure that timely and effective disaster warning is provided." The Director of the Geological Survey through the Secretary of the Interior has been delegated the responsibility to issue disaster warnings "...for an earthquake, volcanic eruption, landslide, or other geologic catastrophe."
42 U.S.C. 4321 *et*. *seq*. P.L. 91-190.	The National Environmental Policy Act of 1969 requires the Geological Survey to comply with Section 102(2)(C) which pertains to review of Environmental Impact Statements (EIS's) prepared by other agencies. The Geological Survey reviews EIS's for nuclear power plant sites and other critical facilities.
43 U.S.C. 506 *et*. *seq*. P.L. 95-578	The Reclamation Safety of Dams Act of 1978 requires the Geological Survey to participate in direct interchange of science information with other agencies. Geologic data developed under the Geologic Hazards Surveys are applicable to dam safety analyses.

Geologic Hazards Surveys are conducted to acquire data useful in predicting and delineating hazards from earthquakes, volcanoes, and ground failures. The overall goal of the Earthquake Hazards Reduction Program is to mitigate earthquake losses that can occur in many parts of the Nation by providing earth-science data and evaluations essential for land-use planning, engineering design, and emergency preparedness decisions. The Geological Survey's Volcano Hazards Program was established to maintain a balanced and well-integrated program of volcanic hazards assessment, hazards reduction, eruption prediction, and supportive fundamental research to reduce the loss of life, property, and natural resources that result from volcanic eruptions and related activity. The objectives of the Landslide Hazards Program are to develop cost-effective methods and technologies for reducing the hazards to public safety and the huge annual economic losses caused by ground failure events.

Earthquake Hazards Reduction Program

Objectives: To mitigate earthquake losses that can occur in many parts of the Nation by providing earth-science data and evaluations essential for land-use planning, engineering design, and emergency preparedness decisions. Specific objectives are: (a) to evaluate the earthquake potential of seismically active areas of the United States; (b) to provide assessments of earthquake hazards and risk in developed regions exposed to the earthquake threat; (c) to predict damaging earthquakes; (d) to provide data and information on earthquake occurrences to the public and scientific community; and (e) to provide data and estimates of the level and character of strong earthquake motion for seismic-resistant design and construction.

Base Program: The USGS Earthquake Hazards Reduction Program conducts fundamental and applied research in earthquake hazards and earthquake prediction. The program is a principal part of the National Earthquake Hazards Reduction Program (created by the Earthquake Hazards Reduction Act of 1977), and includes the major efforts of the Federal Government in earthquake-related studies in seismology, geology, geophysics, tectonophysics, as well as important efforts in soils engineering. The base program is divided into five subelements that follow the current structure of the program, including regional monitoring and earthquake potential studies, earthquake prediction research, regional earthquake hazards assessments, data and information services, and engineering seismology.

The results obtained from regional monitoring and earthquake potential studies form the foundation for work in earthquake prediction research and regional earthquake hazards assessments. Regional seismic monitoring and earthquake potential estimates have improved the accuracy of regional hazard assessments and have provided a quantitative basis, in probabilistic terms, upon which more specific earthquake predictions can be built.

The USGS Earthquake Hazards Reduction Program is augmented and strengthened through support of complementary scientific investigations in universities, State agencies, and private companies. The USGS program is coordinated with earthquake programs in the Federal Emergency Management Agency, the National Science Foundation, and the National Bureau of Standards through the National Earthquake Hazards Reduction Program.

a. Regional Monitoring and Earthquake Potential Studies - The objectives of this subelement are to: (a) delineate seismically active areas and the extent of seismic zones through monitoring with regional seismograph networks; (b) determine the geometry and structure of seismic zones through geologic mapping and geophysical analyses, and (c) use the geological and geophysical data obtained in the objectives above to estimate fault slip rates, maximum earthquakes, and recurrence intervals for active faults and seismogenic zones.

Substantial progress has been made in the past 5 years in estimating the long-term earthquake potential of various seismic zones in the United States. These estimates are based on detailed analyses of current tectonics of seismically active regions as interpreted from geological and geophysical observations. These studies have provided quantitative estimates of slip rates along active faults, earthquake recurrence intervals, and earthquake potential. They have also defined tectonic structures, heretofore unspecified, that give rise to the seismic activity.

Activities in 1986 include:

- Operation of regional seismograph networks in southern California, central and northern California, southern Alaska, the Puget Sound area, western Nevada, Yellowstone Park, central Utah, the central Mississippi Valley, and portions of the Northeastern United States. Earthquake catalogs and maps based on these data are completed on an annual basis.
- Continuation of geological and geophysical field work and fault excavation studies in southern and central California and central Utah. These studies give quantitative estimates of the earthquake potential of individual faults that the seismic monitoring efforts have identified as active.
- Delineation of geologic and seismologic studies of the earthquake potential and tectonic history of the Meers fault in southwestern Oklahoma. The Meers fault was recently found to have ruptured the ground surface during the last 10,000 years. Understanding faults of this nature is important to assessing earthquake hazards in the eastern United States.
- Geologic and engineering studies of the history of recurrance of large earthquakes in the vicinity of Charleston, South Carolina, as revealed in the analysis of liquified sediments and stratigraphic relations.
- Completion of earthquake potential maps of south-central Alaska and the Puget Sound region.
- Continuation of studies of specific seismogenic features, including preshock-mainshock-aftershock sequences, to determine spatial and temporal characteristics of earthquakes and the geometry of crustal fault zones at seismogenic depths.
- Initiate design and prototype equipment development of a National Seismographic Network to replace outdated seismographic networks in the United States. Committees of the National Research Council/National Academy of Sciences have recommended (1980,1983) the establishment of an integrated national seismographic network composed of modern digital seismological instruments to replace existing antiquated networks that have become increasingly costly to maintain.

Activities at the FY 1987 base level will include:

- Operation of the regional seismograph networks and data analysis to provide detailed maps of earthquake locations and seismogenic zones.

- o Refinement of earthquake potential estimates in California in the vicinity of sites proposed for earthquake prediction instrument clusters.

- o Continuation of field mapping and other studies for future earthquake potential estimates in the Pacific northwest, Utah, the central Mississippi Valley, Oklahoma, and seismic regions of the eastern United States.

- o Development of techniques to revise previous earthquake potential estimates based on recent seismicity or new geologic information.

b. Earthquake prediction research includes field, laboratory, and theoretical investigations of earthquake mechanisms and of the physical characteristics of fault zones, with the goal of establishing the procedures and knowledge needed for the reliable prediction of the time, place, and magnitude of damaging earthquakes. These investigations have been focused on the central and southern California regions, Utah, Missouri, and in a few other selected areas of high seismicity around the world; the latter because frequent earthquakes are required to provide field observations and valid tests of possible earthquake precursors. Assessment of various possible geophysical precursors of earthquakes is emphasized in order to develop the analytical and instrumental capabilities for prediction. Reliable prediction depends on observing a variety of precursors, understanding their causes, and understanding the basic physics of the earthquake source. Thus, a prediction research program must be broadly based and its success will depend heavily on observations of precursors and earthquakes using a variety of densely spaced instruments.

The specific objectives of this subelement are to: (a) develop earthquake prediction methods and techniques to provide a rational basis for estimates of increased earthquake potential and short-term predictions; (b) evaluate in probabilistic terms the relevance of various geophysical, geochemical, and hydrological data to accurate earthquake prediction; (c) develop theoretical and laboratory models of the earthquake process to guide observational experiments and to test empirical, predictive techniques; and (d) determine the physical mechanism for reservoir-induced seismicity and develop techniques for predicting and mitigating this phenomenon.

Program activities in FY 1986 include:

- o Increased monitoring of the San Andreas fault near Parkfield, California, where the USGS has forecast that there is a high potential for a magnitude 6 earthquake in 1988±5 years. To derive the maximum scientific and engineering benefits from the predicted earthquake, an experiment has been established to observe the final stages of the process leading up to the earthquake and to measure co-seismic and post-earthquake phenomena. The forecast has been reviewed and endorsed by the National Earthquake Prediction Evaluation Council and the California Earthquake Prediction Council.

- o The State of California has recognized the importance of the Parkfield earthquake prediction experiment and provided $1 million in FY 1986 to increase the instrumental monitoring effort there, and to provide for real-time analysis by State officials in their effort to prepare emergency response activities to issue and deal with a prediction.

- Completion of site studies required for development of a prototype operational earthquake prediction system for Southern California.
- The analysis, for prediction purposes, of the seismic data from 440 seismograph stations in California and in other seismically active zones in the United States. (Network operation and routine data analysis are supported under Regional Monitoring and Earthquake Potential Studies.)
- The resurvey of 10 geodetic strain monitoring networks along the San Andreas fault and in other tectonic areas of the United States. These networks contain several hundred survey lines.
- The measurement of crustal deformation and fault offset and the recording of geophysical and geochemical data at sites along the San Andreas and other active faults in the western United States.
- Operation of prediction data and analysis centers in southern California (California Institute of Technology, Pasadena) and central California (Geological Survey, Menlo Park).
- Continued purchase, installation, and operation of satellite data collection platforms and related electronics in southern and central California to establish satellite transmission of data from field earthquake prediction monitoring sites to increase reliability and timeliness of the data.
- Testing and operation of 3 geodetic receivers for use with the Global Positioning System to evaluate and measure crustal deformation and fault movement.
- Cooperative earthquake prediction efforts in Japan, the People's Republic of China, and the Soviet Union.

In the past 5 years progress has been made in the understanding of the earthquake process and where the next ones are most likely to occur. Highlights of the most noteworthy scientific advances of the past 5 years are:

- Recurrence intervals for great earthquakes on plate boundaries can be specified rather accurately given certain information on the previous earthquake history and rates of tectonic deformation of that segment of the boundary.
- Earthquake sequences occurring at the same place but decades apart may have nearly identical characteristics. The behavior of at least some faults appears to be surprisingly consistent for recent history, making short-term forecasting very promising.

- The rate at which strain accumulates generally appears to be highly linear even in regions as large as southern California but may show sudden widespread pulses and, if for various other reasons, a large earthquake were expected, such a pulsation in the strain field could provide a warning.

- Foreshocks appear, by variations in their focal mechanisms or by abruptly terminating, to give short-term warning of the impending mainshock in certain, but not all, geologic settings.

- The probability for great earthquakes occurring along the San Andreas fault in southern California may be tested with an earthquake "instability" model that uses computer modelling of time-varying physical and fault strength data to calculate recurrence times.

- Monitoring equipment has been installed and cooperative research projects are underway at the People's Republic of China's primary earthquake prediction experiment site in Yunnan Province. Information acquired in this experiment should speed our attempts to learn how to predict earthquakes.

At the FY 1987 base level, earthquake prediction monitoring and data analysis will be concentrated along those active faults in the western United States considered to have the greatest earthquake potential, i.e., the southern San Andreas fault east of Los Angeles and the central San Andreas in the San Francisco Bay region and near Parkfield.

Special activities planned for FY 1987 include:

- Continue intensive monitoring of the Parkfield, California, region, where a moderate-sized earthquake may occur in the next few years.

- Continue periodic data reviews and earthquake potential evaluations by in-house groups and the National Earthquake Prediction Evaluation Council.

- The development of state-of-the-art instruments and sustain efforts toward emplacing these instruments in holes drilled near or into fault zones to avoid extraneous signals observed near the surface.

- Complete the conversion to satellite geodetic systems for crustal deformation measurements.

- Replacement of conventional geodetic measuring techniques with satellite-based techniques.

c. Regional Earthquake Hazards Assessments - In addition to national and regional earthquake monitoring and earthquake potential estimates, hazards assessments in developed regions provide significant and useful results because of the exposure of population and property to damaging earthquakes. These results are built on earthquake potential and seismic monitoring studies described above. Regional hazard assessments require concentrated and specialized attention to a specific area, and they require a synthesis of a wide variety of information. These studies form the foundation for analyses conducted on a city-by-city, street-by-street basis by State and local governments.

Because of the severity and frequency of ground shaking expected and the distribution of population, the hazards and risks due to earthquakes are greatest in the large urban centers of the western United States and Alaska. The program strategy consists of conducting investigations (using geological, seismological, geophysical, and geodetic techniques) to identify and map those geologic features near or within a given region that are most likely to be the source of damaging earthquakes and to estimate recurrence rates and maximum size of earthquakes that are likely to occur on these features. For the evaluation of the hazards from these earthquakes, regional-scale maps of the distribution, depth, and physical properties of surficial geologic units are combined with the predicted nature of the ground shaking to develop deterministic and probabilistic estimates of ground motion. Evaluations of the hazards that would be associated with earthquake-induced landslides, liquefaction, surface faulting, and coastal uplift or subsidence are made. Because of the relatively low earthquake occurrence rates in the East and because of the burial of the active geologic structures in some regions by younger sediments, specialized techniques such as detailed subsurface mapping are required to identify the sources of the earthquakes.

The specific objectives of this program subelement are: (1) based on current research results, prepare synthesis reports and maps that assess earthquake hazards in urban regions at risk to damaging earthquakes; (2) develop techniques for estimating strong ground shaking, ground failure, and other earthquake-related hazards in urban regions; (3) conduct research and specific studies to estimate more accurately potential losses due to earthquakes; and (4) foster implementation of the results in terms of loss-reduction measures.

Program activities in FY 1986 include:

- Special symposium in Los Angeles to deliver results of southern California studies to the local user community.
- Completion of a joint effort with the State of Utah for an earthquake hazards assessment of the Wasatch Front region.
- Joint planning effort with the State of Alaska to prepare an earthquake hazards assessment of the Anchorage region.

Efforts to be emphasized in FY 1987 include:

- Implement a joint effort with the State of Alaska to advance the work of earthquake hazards assessment of the Anchorage region.
- Define the potential for large earthquakes in the Puget Sound, Washington region, and involve local officials in planning mitigation steps.
- Continuation of research and technical studies of the earthquake hazards in the Nevada and Mississippi Valley (New Madrid rift) areas, and in

seismic areas of the the Eastern United States. These studies will form the basis of future joint (State/Federal) hazards assessment studies and publications.

d. Data and Information Services - A key link in the development of a successful seismic hazards mitigation and disaster response program is the collection and transmittal of earthquake data for analysis and evaluation. The National Earthquake Information Center (NEIC) coordinates the rapid location and evaluation of earthquakes in the United States and large earthquakes that occur throughout the world. Within NEIC, the National Earthquake Information Service (NEIS) distributes , in a timely manner, earthquake information and data to the public and the scientific research community. NEIS also provides data support for the Tsunami Warning System of the National Oceanic and Atmospheric Administration and acquires fundamental data critical for seismic risk appraisal. Products of the NEIC include weekly, monthly, quarterly, and annual reports on earthquake activity, maps of earthquake distribution, and information services to the public. A 24-hour alert service is provided and appropriate authorities are notified of any potentially damaging earthquakes within the United States. This service allows for the early inspection of dams and other critical facilities for possible earthquake damage.

To provide basic data for earthquake research, the Geological Survey supports the operation of the Worldwide Standard Seismograph Network and the Global Digital Seismograph Network. The Geological Survey is also developing, with support from th Department of Defense, the Global Telemetered Seismic Network (GTSN) to provide real-time earthquake data from the southern Hemisphere where seismic coverage has traditionally been sparse. Data from these networks is provided to various Department of Defense agencies for the detection and study of underground nuclear explosions. The data are also used in studies of plate tectonics, Earth structure, and earthquake source mechanisms, and provided the foundation of the "seismic gap" theory now applied to earthquake prediction.

Effective transmission of technical information about significant earthquake hazards and warnings to State and local officials requires the development of established and knowledgeable points of contact. Points of contact in virtually all States have been established for geologic hazards. Meetings are held and background educational materials are routinely distributed to describe the nature and use of technical information about earthquakes.

In FY 1987 Data and Information Services will emphasize:

- o Continuation of the development of the Global Telemetered Seismic Network.
- o Cooperation with the Incorporated Research Institutes in Seismology (IRIS), a University-based consortium, in the development of an advanced worldwide Digital Seismographic Network.
- o Conversion of some WWSSN stations to alternative recording systems to avoid the high costs of photographic recording.

e. Engineering Seismology - The measurement, analysis, and theoretical estimation of strong ground shaking near earthquake epicenters are used by engineers and architects in the design of structures and are extremely important in the siting, design, and construction of critical facilities. Theoretical and interpretative studies that explain the character of strong ground motion, and cast obervational data in forms more useful to the engineer, have been part of the Geological Survey Earthquake Hazards Reduction Program for several years. In FY 1983 responsibility for the National Strong Motion Network, a network of instruments designed specifically to record only severe earthquake ground shaking, was transferred to the Geological Survey from the National Science Foundation. The transferred observational responsibility and the existing analytical efforts have been combined to form the engineering seismology subelement.

The objectives of this subelement are: (1) Operate the National Earthquake Strong Motion Network and an associated data center. This network consists of some 500 specially designed instruments to record very strong ground motion on the ground and in structures near the source of damaging earthquakes. These instruments are located in seismically active regions of the United States. (2) Archive these data and disseminate them to engineers, designers, private institutions, and government agencies concerned with the siting, design, and construction of critical facilities and the establishment of building codes. (3) Develop techniques and standards for presenting the strong motion data in a more useful context than its raw form. The frequency content, average ground acceleration and velocity, duration of the ground shaking as well as the effects of local soil conditions, and the geometrical relationship of recording site to the earthquake source, if not taken into account, can yield misleading interpretations. (4) Conduct research on the estimation of the level and character of strong earthquake motion for application in engineering design in instances where no relevant data exist. (5) Conduct research on the physics of seismogenic failure including the dynamic processes controlling fault rupture and the seismic radiation field.

Recent accomplishments in Engineering Seismology include:

- Characterization of unusual strong ground motion associated with the 1984 Morgan Hill, California, earthquake. Strong ground motion was focused in the direction of rupture propagation producing an energetic release of seismic radiation near the end of the rupture zone that caused building damage in Morgan Hill.

- Analysis of accelerograms that reveals that the rupture velocity of faults is often variable and that high-frequency ground motion originates at irregularly distributed regions on the fault's surface.

- The development of ground-motion models that are successful in predicting measures of strong motions over a broad range in earthquake magnitude.

  The determination that crustal strength is probably the factor governing the seismic source processes that give rise to high-frequency ground motion. Thus, the state of stress as well as the focal depth is an important factor in the prediction of seismic ground motion.

- The design of a prototype dense array of accelerometers to be installed in the Parkfield, California region.

In FY 1987 Engineering Seismology will emphasize:

- Continued operation of the National Earthquake Strong Ground Motion Network and associated data center.
- Provision of strong motion data in its raw form and in other formats to engineers, architects, and planners.
- The conduct of research on the estimation of the level and nature of strong earthquake shaking and the physics of fault rupture and propagation.

Planned Workload

	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Prediction Research Monitoring				
Geodetic networks	25	10	10	10
Geophysical and geochemical sites	133	120	120	120
Operate GPS geodetic receivers	0	3	3	3
Operate two-color lasers	2	2	2	2
Satellite data collection platforms	51	68	68	68
Seismograph Networks	15	14	14	10
Research Projects	130	130	130	120
Research Contracts	100	100	100	100
Technical Reports and Maps	190	180	180	160
Station-Years of Seismograms from worldwide nets	130	130	130	130

Estimated subelement costs (in thousands):

(Subelement costs are simple averages; in actuality, costs may vary widely depending upon considerations such as location of specific hazards assessments, density and location of monitoring networks, and subject of research projects.)

Estimate	FY 1986	FY 1987 Base	FY 1987
Regional Monitoring and EQ Potential	$ 9,200	$ 9,242	$ 7,479
Earthquake Prediction Research	13,110	13,170	12,170
Regional Earthquake Hazards Assessments	5,775	5,801	5,801
Data and Information Services	4,500	4,520	4,520
Engineering Seismology	3,290	3,305	3,305
	35,875	36,038	33,275

Decrease for FY 1987

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Change
$	36,038	33,275	-2,763
(FTE-T)	(479)	(479)	(--)

In this program high-resolution regional seismic data is collected through regional earthquake monitoring networks. Support for these networks is being reduced to meet higher priority Departmental programmatic requirements. These networks consist of dense arrays of seismometers (15 to 130) covering various seismically active regions of the United States. They are usually operated by local universities, or, as in the case of central California, by the U.S. Geological Survey. Other networks are in southeastern California (Palm Springs-Riverside); southern Alaska, Adak, and nearby islands in the Aleutians; the Puget Sound region and western Washington; the central Mississippi Valley region (Tennessee, Arkansas, Missouri, Illinois, Indiana, and Kentucky); and the Northeastern United States (New York and New England).

While support for these networks will be reduced under the proposed budget, an effort will be made in the ensuing years to establish a National Seismographic Network of about 50 modern seismographic stations that will maintain a seismic record of the country. This information is needed for assessing earthquake hazards and establishing earthquake design criteria for critical facilities. Because of fewer stations covering a wide region, the national network will not detect smaller earthquakes nor provide earthquake locations that are as accurate as those of existing regional networks. However, considerable cost savings in operations should be realized once the new equipment is in place. Discussions are underway with other agencies to provide the support for the initial purchase of equipment.

Regional seismographic stations being operated for earthquake prediction purposes in central and southern California will continue to gather base-line data needed to identify earthquake precursory phenomena.

Theoretical and laboratory experiments in earthquake prediction will be reduced. Projects to gather data relevant to earthquake prediction at foreign sites in China, the USSR, and elsewhere will also be reduced.

Distribution of change by object class

The object class detail for the proposed $2,763,000 decrease is as follows:

	Amount
Travel and Transportation of Persons	$108,000
Transportation of Things	99,000
Communications, Utilities, and Miscellaneous Charges	300,000
Printing and Reproduction	81,000
Other Services	1,225,000
Supplies and Materials	472,000
Equipment	478,000
Total	$2,763,000

Volcano Hazards

Objectives: The goal of the Volcano Hazards Program is to reduce the loss of life, property, and natural resources that can result from volcanic eruptions and related hydrologic events. This goal is being addressed by a program of studies with the following objectives:

- Identification of potentially hazardous volcanoes and volcanic areas in the United States and delineation of zones of unusually high risk.
- Determination of the kind, magnitude, and extent of possible future volcanic eruptions.
- Early detection of precursory activity at potentially active volcanoes by maintenance of seismic, geodetic, geophysical, geochemical, and hydrological monitoring networks, so that warnings of eruptions and related hazards may be issued in a timely manner.
- Comprehensive monitoring of eruptions as they occur.
- Determination of flood-hazard potential by field investigations and modeling of hydrologic and geomorphic factors relative to eruption-induced erosion and filling of stream channels.
- Elucidation of the processes that lead to eruptions and related hydrologic hazards through a program of basic research.
- Collection, compilation, and dissemination of information on volcanic and related hydrologic hazards to Federal, State, and local agencies.

Base Program: The main components of the Volcano Hazards Program are volcanic hazards assessment, volcano monitoring, and fundamental research. Objectives, significant recent accomplishments, current program activities, and FY 1987 plans for each component are described below.

a. Volcanic hazards assessments are based on geologic and hydrologic studies that provide basic information essential for the determination of volcanic risk and the mitigation of the impacts of volcanic hazards. For many volcanoes, the nature of their activity remains similar over relatively long periods of time; thus, the study of the past activity of a given volcano provides a means of forecasting or predicting the nature of its future activity. Detailed studies of the size, distribution, and age of various historic and prehistoric volcanic deposits form a basis for estimating the kinds, magnitudes, timing, and effects of possible future eruptions.

Hazards assessments are essential to wise land-use planning in volcanic terrains and to the development of emergency response plans. To be effectively implemented, these plans must be completed well before an eruption occurs. The value and effectiveness of such assessments are demonstrated by a U.S. Geological Survey report that pre-dated the 1980 eruption of Mount St. Helens by 2 years. This assessment suggested that the volcano could erupt before the end of the twentieth century and that the eruptive activity would likely be explosive. Use of the information in this hazards assessment prevented a much greater loss of life from the catastrophic eruption that occurred on May 18, 1980.

Volcanic hazards studies in recent years have been concentrated on the Cascade volcanoes of the Pacific Northwest because they tend to erupt relatively frequently and often violently (as demonstrated by the Mount St. Helens 1980 eruption) and because population density and level of economic development of the region are high. The risk to life and property in their vicinity is, therefore, generally greater than elsewhere. Volcanic hazards maps and assessment reports, some of them preliminary, have been published for Mt. Baker, Glacier Peak, Mt. Rainier, and Mount St. Helens in Washington, Mt. Hood in Oregon, and Mt. Shasta in California. Preliminary assessment reports have also been prepared for the Long Valley-Mono Lake area in California and the islands of Hawaii and Maui. Efforts in FY 1987 will be focused on those areas with greatest need for initial or updated assessment, based on the combined factors of likelihood of eruption and intensity of societal impact.

Recent accomplishments in hazards assessment include:

- Publication of the results of geologic mapping at the Inyo volcanic chain near Long Valley caldera, California, which demonstrate that about 600 years ago the chain was in nearly simultanous eruption from 3 vents along a 5-mile segment due to intrusion of a vertical dike of magma at shallow depths. This past volcanic activity, consisting of dome extrusion accompanied by explosive eruptions, provides a model for possible future volcanic events at Long Valley.

- Identification of the remains of a massive debris avalanche that occurred about 350,000 years ago at an ancestral volcanic edifice of Mt. Shasta in California. Recognition of this deposit, which covers about 175 square miles and has a volume of more than 6 cubic miles, is important in determining the possible maximum extents of such catastrophic events.

- Completion of a report documenting the magnitude and frequency of debris flows and areas of hazard on Mt. Shasta, California.

- Completion of a report documenting the timing of young volcanic eruptions in the Three Sisters region of Oregon and detailing the distribution of products of explosive eruptions.

- Completion of a report documenting the pre-1980 volcanic ash deposits from Mount St. Helens, Washington.

- Completion of a report assessing the stability against erosion by percolating water of the South Fork Castle Creek debris blockage near Mount St. Helens, Washington.

- Completion of a report describing mudflow hazards in the vicinity of Lassen Peak, California.

- Completion of the hydrologic-hazards assessment of the Mt. Hood area in Oregon.

- Major contributions to a manual for international training in geologic and hydrologic hazards, and to a volcano hazards training course held in the Philippines for Southeast Asian countries.

Program activities in hazards assessment in FY 1986 include:

- Mapping and related volcanic hazards assessment studies at Lassen Peak and Long Valley in California, Mount St. Helens and Mt. Rainier in Washington, Three Sisters volcanoes and Newberry volcano in Oregon, volcanoes on the island of Hawaii, and selected Alaskan volcanoes; hydrologic hazards assessments at Three Sisters volcanoes, Oregon, and Mt. Baker, Washington.

- Geomorphic studies of the Mount St. Helens debris avalanche and mudflow deposits to assess the effects of persistent erosion and channel filling on downstream flood hazards.

- Observational study of the behavior of active mudflows at Mount St. Helens to better understand mudflow mechanics and to develop predictive models of mudflow hazards.

- Dam-break analysis for the lake at South Fork Castle Creek near Mount St. Helens, in order to evaluate the hazard of a major flood caused by a potential failure of the blockage forming the lake.

- The USGS provided emergency technical assistance to the Government of Colombia following the catastrophic eruption of Nevado de Ruiz on November 13, 1985. With financial assistance from the U.S. Agency for International Development/Office of Foreign Disaster Assistance, the USGS established a monitoring network of seismometers, tiltmeters, and other geophysical equipment to detect changes in earthquake activity and ground deformation that may be premonitory to future eruptive activity at the Ruiz volcano.

Plans for hazards assessment activities at the base level for FY 1987 include:

- Continued mapping and related studies for assessment of volcanic hazards at Long Valley, Mount St. Helens, Mt. Rainier, Newberry volcano, Lassen Peak, and at Hawaiian and selected Alaskan volcanoes; continued hydrologic hazards assessment studies at Three Sisters volcanoes and reinitiation of the hydrologic hazards assessment at Mt. Rainier, Washington.

- Initiation of hazards assessment studies at Medicine Lake volcano, California.

- Continued geomorphic studies of the Mount St. Helens debris avalanche and mudflow deposits to assess and document the effects of persistent erosion and channel filling, including an evaluation of the impacts on the proposed long-term sediment-retention structure to be built by the Army Corps of Engineers.

b. Volcano monitoring is carried out to detect and track as early as possible the rise of magma from depth into the shallow crust so that warnings can be issued before the magma erupts. Monitoring is conducted at different levels of intensity depending on the state of activity at any particular volcano. Volcanoes that are actively erupting and posing a serious, continuing threat to nearby life and property are monitored continuously and intensively. Volcanoes that are currently dormant but have been determined to be potentially dangerous on the basis of volcanic hazards assessment studies are monitored periodically using selected methods. Hydrologic monitoring is maintained at Mount St. Helens and at Long Valley, California, to provide early warning of hazardous floods and mudflows that can be generated from an eruption. Geological Survey monitoring activities are conducted mainly at the Hawaiian Volcano Observatory on the island of Hawaii, at the Cascades Volcano Observatory in Vancouver, Washington, in the Long Valley caldera-Mono Craters area, California, and at Yellowstone National Park.

The Hawaiian Volcano Observatory, established in 1912 and operated by the Geological Survey since 1948, has been instrumental in developing most of the volcano monitoring methods and tools now used worldwide. The Cascades Volcano Observatory was established in 1980 to monitor and study the current activity at Mount St. Helens (which is expected to continue for several decades) and to serve as a base for periodic monitoring of the other, less active Cascade volcanoes. Seismic monitoring of Mount St. Helens, Glacier Peak, Mt. Baker, Mt. Adams, Mt. Rainier, and Mt. Hood is carried out in Seattle by a joint University of Washington/Geological Survey team. Seismic coverage of northern California volcanoes is maintained by the Geological Survey in Menlo Park, California.

Extensive monitoring studies in the long-dormant but potentially dangerous Long Valley caldera-Mono Lake volcanic area in east-central California were begun in 1980 after a sudden renewal of seismic activity. Seismic, geodetic, and geophysical monitoring have suggested the presence of a partly molten magma reservoir approximately 5 miles beneath the Long Valley caldera, and have revealed that nearly 20 inches of ground uplift occurred above it between 1980 and 1984 and that horizontal extension inside the caldera is continuing. Earthquakes, accompanied by more continuous tremor localized in an epicentral area near the town of Mammoth Lakes, suggest that magma may have been injected to crustal depths as shallow as 2 miles.

At Yellowstone National Park, recent geologic activity is similar in many respects to the unrest at Long Valley. The Yellowstone region is one of extensive young volcanism and has experienced several strong earthquakes, numerous earthquake swarms, significant hydrothermal changes, and almost 90 centimeters of crustal uplift during the past century. In order to document continuing changes, the Geological Survey increased its seimic and geodetic monitoring effort there in 1983.

Recent accomplishments in volcano monitoring include:

o Major improvement of the monitoring capability of the Hawaiian Volcano Observatory, including beginning of construction of a new observatory building (funded under an FY 1984 appropriation by the Congress to the National Park Service), installation of a new computer system, and development of a system to acquire digital seismic data in real time for the analysis of nearby seismicity.

o Short-term warning and monitoring of each of the numerous phases (40 as of January 1986) of the 1983-1986 on-going eruption of Kilauea volcano.

- Publication of the results of geophysical, geochemical, and geological monitoring of the March 25 to April 15, 1984 eruption of Mauna Loa. This eruption was forecast by USGS scientists in 1983 based on monitoring results that showed high seismic activity and active deformation taking place near the summit of the volcano.

- Completion of a report documenting the 1981-83 growth of the lava dome in the crater of Mount St. Helens.

- Continued refinement and automation of the extensive geodetic, seismic, and geochemical monitoring networks in the Long Valley Caldera-Mono Craters area, including installation of an ultra-sensitive borehole strainmeter.

- Documentation of continued ground-surface uplift in Yellowstone National Park.

- Rapid assistance to volcano monitoring efforts at Mayon volcano (Philippines), Pozzuoli volcano (Italy), and Rabaul volcano (Papua New Guinea), with cooperation from the U.S. Agency for International Development.

Program activities in volcano monitoring in FY 1986 include:

- Seismic, geodetic, geochemical, and geophysical monitoring of the active volcanoes of Hawaii (Kilauea and Mauna Loa) and of Mount St. Helens, Washington.

- Monitoring of seismic and geodetic networks at selected, potentially active Cascade volcanoes.

- Seismic, geodetic, hydrologic, geochemical, and geophysical monitoring at Long Valley caldera, California.

- Seismic and geodetic monitoring at Yellowstone National Park.

- Continued support of the computer-enhanced hazard-warning system for the debris-dammed lakes near Mount St. Helens using satellite and radio-telemetry units for transmitting real-time water-level data to state and local emergency officials.

- Hydrologic monitoring at Mount St. Helens, including ground-water modeling and continual re-evaluation of the stability of the Mount St. Helens debris-dammed lakes (especially South Fork Castle Creek Lake which is least stable); intensified monitoring at Coldwater Lake to observe changes that occur because of increased inflow from the Spirit Lake diversion tunnel built by the Army Corps of Engineers.

Plans for volcano monitoring activities at the base level for FY 1987 include:

- Continued seismic, geodetic, geochemical, and geophysical monitoring of the active volcanoes of Hawaii and of Mount St. Helens, Washington.

- Continued monitoring of seismic and geodetic networks at selected, potentially active Cascade volcanoes.

- Continued seismic, geodetic, hydrologic, geochemical, and geophysical monitoring at Long Valley caldera, California.

- Continued seismic and geodetic monitoring at Yellowstone National Park.

- Continued hydrologic monitoring at Mount St. Helens, including the monitoring and re-evaluation of the stability of the Mount St Helens debris-dammed lakes (especially South Fork Castle Creek Lake which is the least stable).

- Relocation to the new Hawaiian Volcano Observatory.

c. Fundamental research has the general goals of establishing 1) a statistically valid basis for explaining the distribution of volcanoes and volcanic eruptions in space and time, and 2) a sound theoretical and empirical basis for understanding volcanic processes and for predicting volcanic eruptions and related hydrologic consequences. The present state of knowledge does not yet permit prediction of the specific time, place, and nature of eruptions except for certain kinds of eruptive activity at the closely monitored, active volcanoes such as Kilauea, Mauna Loa, and Mount St. Helens. Continuing research is required for studies of the correlation of volcanic activity with other possibly causative or related geophysical phenomena, the physical properties of magma and lava, and the mechanisms of magma generation at depth, transport through the crust, and eruption at the surface. Results of such studies are vital to our understanding of the mechanisms and causes of volcanism, and provide the only sound basis for predicting eruptions and assessing volcanic and related hydrologic hazards, thereby reducing risk to life and property.

Recent research accomplishments include:

- Publication of topical papers on active tectonic and magmatic processes beneath Long Valley caldera as they relate to the likelihood and nature of future volcanic eruptions in the region.

- Publication of a major paper describing new seismic methods that allow delineation of the configuration of the magma body that underlies the Long Valley caldera, California.

- Participation in research drilling carried out by Sandia National Laboratory and the Department of Energy at Long Valley, California, including collaborative studies of core from the subsurface conduit that fed eruptions approximately 600 years ago along the Inyo volcanic chain.

- Development and documentation (in cooperation with Sandia Laboratories) of a model for the evolution of volcanic gases as magma rises to the surface, moves laterally in dikes, and is erupted at Kilauea volcano, Hawaii.

- Sponsorship of a workshop on hazards, processes, and eruptive deposits of volcanic blasts, in association with the International Association of Volcanology and Chemistry of the Earth's Interior.
- Utilization of hydrologic data generated after completion of the diversion tunnel from Spirit Lake by the release of progressively greater sustained discharges into South Coldwater Canyon. Hydrologists were able to expand their understanding of erosional processes and document geomorphic changes in the canyon for a wide range of deposits left by the May 1980 eruption of Mount St. Helens.
- Testing of new equipment and techniques at Mount St. Helens to improve sample quality and extend the range of field conditions under which samples and hydrologic measurements can be obtained.

Research activities in FY 1986 include:

- Studies aimed at detection and characterization of magma bodies using advanced seismic techniques, as well as theoretical models.
- Review of historical activity, ground deformation, thermal activity, and eruptive activity of volcanoes throughout the world in order to determine sigificant patterns of geological conditions that lead to major volcanic eruptions.
- Refinement of geophysical and geochemical techniques that show promise for forcasting volcanic eruptions, including precise location of seismic source regions by analysis of multiple characteristic events, definitive evaluation of hydrogen monitoring, and development of electrical and electromagnetic methods for following the movement of magma underground.
- Implementation of a seismic array study at Kilauea volcano, Hawaii, in order to understand the source parameters of volcanic tremor and to determine the nature of the seismic sources associated with magma injection.
- Continuation of the development of sediment transport models to improve the capability for routing floods and mudflows and for predicting areas of probable inundation in the Toutle, Cowlitz, and Columbia River valleys, as well as other areas of the country having the potential for high debris flows.
- Determination of the effects of ultra-high sediment suspension (characteristic of streams in volcanic terrains) on hydraulics, bedload transport, and channel configuration, to better predict the short- and long-term impacts of downstream sedimentation and flooding.
- Continued research and development of hydrologic data-collection techniques, including tests of sediment samplers developed in China.

Plans for research activities at the base level for FY 1987 will include:

- Continued seismic, other geophysical, and theoretical studies for detection and characterization of magma bodies.
- Ongoing review of historical activity, ground deformation, thermal activity, and eruptive activity of volcanoes throughout the world in order to determine sigificant patterns of geological activity that lead to major volcanic eruptions.
- Continued research on the use of seismic, geochemical and geoelectrical techniques as for use in forecasting volcanic eruptions.
- Interpretation of data from a seismic array study at Kilauea volcano, Hawaii, in order to understand the source parameters of volcanic tremor and to determine the nature of the seismic sources associated with magma injection.
- Continued research to determine the effects of ultra-high sediment suspension on hydraulics, bedload transport, and channel configuration, to better predict the short- and long-term impacts of downstream sedimentation and flooding.
- Development, by means of field studies and analytical modeling, of a better hydrologic understanding of the various mechanisms that generate volcanic debris flows, so that equations may be formulated to predict their travel times, impact forces, and areal extents.

Selected program outputs:

	Planned Workload			
	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Hazards assessments:				
In progress	10	9	7	7
New starts	1	0	2	2
Monitoring operations:				
Geologic	5	5	5	5
Hydrologic	2	2	2	2
Research topics:	6	6	6	6

Estimated average unit costs for selected program outputs at the estimate level for FY 1987:

(Unit costs are simple averages; in actuality, costs may vary widely depending upon considerations such as location of specific hazards assessments, density of monitoring networks, and subject of research projects.)

Hazards assessments:	9 @ $ 350,000
Monitoring operations:	
Volcano observatories (combines geologic and hydrologic operations)	2 @ $2,700,000
Other regional monitoring operations	3 @ $ 300,000
Research topics:	6 @ $ 140,000

Landslide Hazards

Objectives: To reduce landslide losses that occur throughout the United States through:

- Identification of the landslide-prone areas of the United States.
- Investigation of landslide processes and mechanisms and the geologic, topographic, hydrologic, and cultural factors that cause slope failures.
- Development of techniques to forecast and predict landslide occurrence.
- Analysis and design of geotechnical methods to mitigate and control landslide activity.
- Compilation and dissemination of information on landslide hazards and occurrence to Federal, State, and local agencies for land-use planning, engineering design, and emergency preparedness decisions.

Base Program: The Landslide Hazards Program supports nationwide efforts to reduce U.S. landslide losses through integrated field and laboratory research in landslide processes and landslide hazards. Landslides have become one of the Nation's most costly geologic hazards. Landslides annually cause more than $1.0 billion in losses in the United States, and in 1985, resulted in more than 130 to 150 deaths. Slope failures damage or destroy residential and industrial developments, are destructive to agricultural and forest lands, and pollute rivers and streams. The USGS Landslides Hazards Program is the primary focus of landslide research in the United States Government, and includes important efforts in permafrost, subsidence, and other ground failures. The main components of the Landslide Hazards Program include Landslide Hazards Assessment, Landslide Process and Prediction Studies, Landslide Mitigation and Control, and Arctic Environmental Studies.

a. Landslide Hazards Assessment - The USGS is charged with the Federal responsibility to issue warnings of landslides and other geologic hazards, and to provide technical assistance to State and local governments to insure that timely and effective disaster warning is provided. The USGS Landslide Hazards Program provides national leadership in landslide hazards reduction, encouraging nationwide participation through cooperative support of State landslide hazard assessment and reduction activities.

Landslide-hazard mapping and risk evaluation traditionally has been a principal element of USGS landslide research. Significant progress has been made during the past decade in preparing different types of maps related to landsliding in the United States. This experience, together with recent advances in landslide process research, is being used to produce a variety of landslide and slope-stability maps necessary for hazard identification and mitigation.

Recent accomplishments in hazards assessment include:

- Emergency technical assistance to the Commonwealth of Puerto Rico, where an intense tropical storm in October 1985 triggered severe landslide activity. A large landslide at Mameyes (near Ponce), Puerto Rico, killed at least 129 to 150 persons--the worst landslide disaster in United States history. USGS landslide specialists participated in the emergency rescue response, advising rescue officials on the stability and potential hazards of the Mameyes slide. The USGS team also helped island officials in the search and identification of other dangerous landslides, and advised the Commonwealth and local governments on techniques and methods to mitigate and monitor the slide activity.

- Emergency technical assistance to the Colorado Geological Survey to help evaluate and monitor potentially catastrophic landslides near West Vail/Minturn and Grand Junction activitated by rapid melting of record mountain snowpacks in March-June 1985.

- Establishment in FY 1985 of cooperative Federal-State landslide hazards assessment studies with eight State Geological Surveys:

  a) Utah. A multi-disciplinary study of landslides and landslide processes that occurred in the Utah landslide disasters of 1983-84.

  b) Colorado. A regional investigation of the widespread, accelerated landslide activity in 1983-85 in the Rocky Mountains, with a preliminary study of several potentially catastrophic landslide areas.

  c) Montana. Preparation of a map of landslides in the State of Montana.

  d) Wyoming. Reconnaissance landslide mapping to compile and complete a map of landslide hazards of the State of Wyoming.

  e) Ohio. A geologic study of surficial deposits in landslide-prone areas of the Cincinnati (Hamilton County), Ohio, area.

  f) Maine. Geologic studies of the extent, frequency, and causes of landslides in coastal Maine.

  g) Arizona. Preparation of a preliminary assessment of landslide activity in Arizona.

  h) New York. Compilation of a map of landslides in the State of New York.

- Implementation of a cooperative US-China study of landslides and landslide hazards in the People's Republic of China and the United States, under the aegis of a bilateral Protocol in the Earth Sciences.

Program activities in Landslide Hazards Assessment in FY 1986 include:

- Initiation of a landslide probability and risk assessment of the Wasatch Front, Utah, area.

- Investigation of historic and potential landslide dams in the moutainous Western United States.

- Establishment of eight new cooperative Federal-State landslide hazards assessment studies with State Geological Surveys:

  a) Puerto Rico. An island-wide study of the widespread, destructive landslide activity initiated by Tropical Storm Isabel in October 1985.

  b) Utah. Continued study of landslides and landslide processes that occurred in the Utah landslide disasters of 1983-84.

  c) Colorado. Detailed investigations of several large, potentially catastrophic landslides in the central and western Rocky Mountains.

  d) Ohio. Compilation of a map of landslides and surficial deposits in the Cincinnati (Hamilton County), Ohio, area.

  e) Idaho. Preliminary assessment of landslide activity in Idaho.

  f) Arizona. Compilation of a map of landslides in the State of Arizona.

  g) New Mexico. Preparation of a State landslide map.

  h) Washington. Review of disastrous debris-flow activity in Washington State.

- Reconnaissance mapping to compile a landslide susceptibility map of Maryland.

At the FY 1987 base level, Landslide Hazards Assessment will emphasize:

- Preparation of a new summary landslide hazards assessment of the United States from cooperative Federal/State landslide mapping.

- Initiation of a landslide hazards assessment of the Appalachian Mountains.

- Completion of landslide probability studies of the Wasatch Front, Utah.

b. Landslide Process and Prediction Studies. USGS response to recent landslide occurrences in Puerto Rico, Utah, Colorado, and California has resulted in an evolving, expanding USGS effort in landslide process research directed toward landslide forecasting. USGS investigations of the landslide failures--and the association of rainfall/snowmelt and ground-water levels at the time of failure--have demonstrated relationships between these parameters that may permit forecasts of potentially hazardous landslide activity. Landslide activity is predictable if landslide processes are understood.

The USGS is conducting a broad, intensive investigation of landslide processes, particularly of debris flows and debris avalanches, which caused extensive property damage and loss of life during the recent Puerto Rico, Utah, Colorado, and California landslide emergencies. USGS scientists are working to develop a precise understanding of the mechanisms and locales of landslide initiation through a) documentation of historic episodes of landslide activity; b) theoretical and laboratory modeling of the landslide processes; and c) direct in-situ monitoring of the landslide failures at experiment sites in California, Utah, Colorado, and New England.

Recent accomplishments in landslide process and prediction studies include:

- Determination of the relationship between rainfall intensities and debris-flow activity during major rainstorms in the Coast Ranges of northern and southern California.
- Development of landslide experiments in the Santa Cruz Mountains near San Francisco, California, and the Western Transverse Ranges near Los Angeles to monitor and record in real-time the association of rainfall, changing ground-water levels, and landslide movement.
- Field investigations of the mechanics of the movement of large landslides in the Wasatch Plateau of Utah and Colorado.
- Identification of relationships between channel morphology, debris-flow materials, and runout distances of debris flows.

Research activities in FY 1986 include:

- Development of a landslide experiment site in the Green Mountains of Vermont to monitor in real-time the development and failure of rock falls and rock slides, and their association with changing ground-water levels and climate.
- Completion of an investigation of large landslides in the White Bluffs of the Columbia River, central Washington, induced by seepage from irrigation.
- Conclusion of a multi-year study of deep-seated gravitational landsliding in Colorado and other mountain localities.
- Development of theoretical models of the large-scale gravitational spreading and debris-flow initiation.
- Continuation of geologic mapping of the stratigraphy and soils exposed in the large recent landslides in the west flank of the Wasatch Plateau to establish chronologies of landslide movement.

Activities planned at the the FY 1987 base level include:

- Instrumentation of several large landslides in the mountains of Utah and Colorado to directly monitor deep-seated landslide movement and its association with changes in ground-water level, precipitation, and material strength.
- Assessment of the frequency and distribution of historic catastrophic landslide activity in the Appalachian Mountains to identify principal landslide processes and their relationship with hurricane and storm activity.

c. Landslide Mitigation and Control. The USGS Landslide Hazards Program promotes landslide hazards mitigation through engineering design and land-use planning, disseminating landslide research data to engineers, designers, private institutions, and government agencies concerned with the siting, design, and construction of critical facilities and the establishment or modification of building codes. A Landslide Information Center was established in 1982 to acquire data on landslide research and its use in the reduction of landslide hazards, and to promote the mitigation of such hazards through engineering design and land-use planning. The Center seeks to provide a centralized source of bibliographic and landslide activities information in a computerized data storage and retrieval system.

d. Arctic Environmental Studies. The Landslide Hazards Program also supports fundamental research in Arctic surficial processes and engineering geology problems in Alaska. These studies include geological study of surficial deposits, study of the distribution and nature of permafrost, and preparation of engineering/environmental-geologic studies of Alaskan transportation cooridors and of areas where there is a potential for the development of hydrocarbon and other mineral resources.

Recent accomplishments in Arctic environmental studies include:

- Preparation of engineering-geologic maps (scale 1:250,000) of the National Petroleum Reserve, the central Brooks Range, and the southwestern Copper River Basin area, showing potential geologic hazards to construction in development/transportation corridors.

Program activities in Arctic studies in FY 1986 include:

- Investigation of the glacial geology of the western Brooks Range.

- Engineering-geologic mapping of the Bettles-to-Bornite mining area, and the Copper River Basin in the Glenn and Richardson Highways areas.

- Continued compilation of a new permafrost map of Alaska.

Activities planned for FY 1987 include:

- Completion of engineering-geologic mapping of the Copper River Basin and the Bettles-to-Bornite mining areas.

- Preparation of a landslide inventory and bibliography of the State of Alaska.

	FY 1985	FY 1986	Planned Workload FY 1987 Base	FY 1987 Estimate
Process and Prediction Studies				
Debris Flows	9	7	6	4
Slides and Slumps	2	3	4	3
Rock Falls	2	2	2	1
Probability Studies	1	1	1	1
Hazards Assessments				
National Overview	1	1	1	1
Regional Assessments	8	7	7	5
State Coops	8	8	8	2
Hazards Mitigation and Control Information Center	1	1	1	0
Arctic Environmental Studies	1	1	1	1

Estimated subelement costs (in thousands):

(Subelement costs are simple averages; in actuality, costs may vary widely depending upon considerations such as location of specific hazards assessments, density of monitoring networks, and subject of research projects.)

	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Landslide Processes	$ 1,400	$ 1,517	$ 1,562	$1,210
Landslide Hazards Assessments	1,164	1,056	1,019	534
Landslide Mitigation and Control	213	98	98	0
Arctic Environmental Studies	308	311	312	314
	3,085	2,982	2,991	2,058

Decrease for FY 1987

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Change
$	2,991	2,058	-933
(FTE-T)	(43)	(43)	(--)

The Landslide Hazards Program will be reduced by one-third in FY 1987. Four studies of landslide processes and mechanisms will be discontinued, including: 2 investigations of debris flows in Washington State; 1 study of great landslides in the Rocky Mountains of Colorado; and, 1 study of rock falls and slides in Vermont and New Hampshire. These projects provide fundamental data on landslide occurrence for landslide forecasting. Cooperative State landslide hazards assessments with State Geological Surveys will be reduced. Regional assessments of landslide hazards in the Eastern United States will be curtailed through termination of hazards assessments in Maryland and West Virginia. Landslide Mitigation and Control program activities, including the Landslide Information Center, also will be suspended.

Distribution of change by object class

The object class detail for the proposed $933,000 decrease is as follows:

	Amount
Travel and Transportation of Persons	$36,000
Transportation of Things	33,000
Communications, Utilities, and Miscellaneous Charges	100,000
Printing and Reproduction	27,000
Other Services	417,000
Supplies and Materials	159,000
Equipment	161,000
Total	$933,000

Justification of Program and Performance

Activity: Geologic and Mineral Resource Surveys and Mapping
Subactivity: Land Resource Surveys

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Geologic Framework	$	19472		19561	18862	-699
	FTE-T	360		360	360	0
Geomagnetism	$	2146		2157	1629	-528
	FTE-T	31		31	31	0
Climate Change	$	988		992	992	0
	FTE-T	9		9	9	0
Total Requirements	$	22606	21634	22710	21483	-1227
	FTE-T	400	400	400	400	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
22,606	-972	21,634

A $972,000 decrease in the Land Resource Surveys subactivity will necessitate reducing work on some State maps being made under the COGEOMAP element. In addition, reductions in geologic mapping, isotopic age dating, and geologic process studies will delay earthquake research, mineral resource assessments of public lands, and other research. Repeat magnetic field surveys will be reduced; three magnetic induction surveys will be deferred.

Authorization

43 U.S.C. 31(a)	The Organic Act of 1879 authorizes the Geological Survey to conduct "an examination of the geological structure, mineral resources, and products of the public domain."
15 U.S.C. 2901-2908, 31 U.S.C. 25 P.L. 95-367	The National Climate Program Act of 1978 requires that the Climate Change Program contribute information on the long-term natural variability of climate to the National Climate Program. This information is necessary for understanding how the climate system works and for providing a basis for assessing possible effects of human activities on climate and the environment.

42 U.S.C. 5845(c) P.L. 93-438.	The Energy Reorganization Act of 1974, directs all other Federal agencies to "...(2)...furnish to the (Nuclear Regulatory) Commission...such research services for the performance of its functions; and (3) consult and cooperate with the Commission on research development matters of mutual interest and provide such information and physical access to its facilities as will assist the Commission in acquiring the expertise necessary to perform its licensing and related regulatory functions." The Geological Survey conducts geological mapping in areas where future nuclear reactor construction is anticipated, and conducts topical investigations of various geologic processes that could imperil the safe operation of the reactors or other critical energy facilities.
42 U.S.C. 4321 et. seq. P.L. 91-190.	The National Environmental Policy Act of 1969 requires the Geological Survey to comply with Section 102(2)(C) which pertains to review of Environmental Impact Statements (EIS's) prepared by other agencies. The Survey reviews nuclear power plant site and other critical facilities EIS's.
22 U.S.C. 3201 et. seq. P.L. 95-242	The Nuclear Non-Proliferation Act of 1978 provides that under Title V--United States Assistance to Developing Countries--the Geological Survey assists through the State Department and Agency for International Development in evaluation of nuclear facilities sites in other countries.

Land Resource Surveys are conducted to acquire fundamental data necessary to determine the Nation's geologic framework and the processes that have and are shaping it, to understand climate change and its past and future effects on land and water resources, to measure changes in the strength and direction of the Earth's magnetic field, and to prepare a National geologic map data base. The Geologic Framework Program is designed to determine our Nation's geologic framework and the geologic processes that have and are shaping it; to provide accurate geologic maps at various scales in order to better support National mission programs, including well-informed development and use of land, mineral, and energy resources; to site energy-producing facilities safely; and to mitigate geologic hazards. The Federal/State Geologic Mapping Cooperative (COGEOMAP) component of this program provides opportunities for cooperative research between the USGS and State Geological Surveys directed at production of general purpose and specialized geologic maps. The COGEOMAP component is restricted to lands of mutual interest and highest priority to both Federal and State governments, and is an important contributor to the national geologic mapping effort. This component of the program benefits both USGS and State programs and gives State geological surveys access to highly specialized facilities and technical expertise maintained by the USGS.

The Deep Continental Studies component of this program addresses fundamental questions about the composition, structure, formation, and evolution of the middle and lower crust and upper mantle. By integrating surface geologic mapping, research of upper-crustal rocks and structure, and investigations of the deep continents, a three-dimensional model of the lithosphere can be obtained that improves our understanding of the character and distribution of near-surface geologic features and resources and of catastrophic natural hazards. The Geomagnetism Program supports observatories and laboratories which measure changes in the strength and direction of the Earth's magnetic field. The data are used to prepare and publish navigational charts, topographic maps, and specialized magnetic surveys used by industry and Federal and State governments. The Climate Change Program provides a basic understanding of the causes of climate change and past and future impacts of these changes; establishes the long-term history of the rates, frequencies, and magnitudes of climate change through study of the geologic record; determines the effects of climate change on natural resources; and improves techniques for delineating climate history.

Geologic Framework

Objectives: To increase the understanding of our Nation's geologic framework and the geologic processes that have shaped it, in order to better support National mission programs, as well as meet the research needs of government and industry for basic geologic information.

Base Program: Basic research conducted in the Geologic Framework program covers a broad spectrum of topics in geology, geophysics, geochemistry, and seismology. The research provides a major part of the information base utilized by other parts of the USGS, other Federal and State agencies, as well as by the scientific community and private industry, in meeting our Nation's need for baseline geologic information.

Geologic mapping, which forms the foundation and principal data base for nearly all other mission and basic research in the earth sciences, is currently conducted under the Geologic Framework program. The general purpose geologic maps provide a basis for subsequent studies aimed at evaluating geologic hazards, assessing mineral resources, and evaluating geologic framework on a regional scale. The Federal/State Geologic Mapping component (COGEOMAP), initiated in FY 1985, is designed to produce geologic maps in areas of mutual interest to the Geological Survey and State geological surveys, thereby enhancing the efforts of each to respond quickly and effectively to National, State, and local earth science problems. Studies that bear on problems related to the siting and safety of energy producing and other critical facilities are carried out under the Geologic Framework Program by focusing basic research and expertise developed in the core program.

Deep Continental Studies provide information about the composition, structure, and dynamics of the Earth's crust and upper mantle in order to gain an understanding of the evolution of continental interiors and the processes that produce geologic resources and natural hazards. This component of the Geologic Framework Program develops 3-dimensional models of the lithosphere by integrating new investigations of deep continental processes and structures with research of upper crustal rocks.

Depletion of mineral and energy resources, mitigation of geologic hazards in regions of rapidly changing population distribution, as well as geologic factors controlling food production (climate, fertilizer availability, and soils) and the relation between water, soils and disease, and other diverse problems, will require an increasingly detailed and sophisticated knowledge of the Nation's geologic framework in the years ahead. Concurrently, mission programs in mineral and energy resource assessment and geologic hazard reduction will continue to rely on an enlarged and up-to-date fund of geologic knowledge, and particularly on an enlarged and updated geologic map data base. This objective is endorsed by the National Academy of Science, the State geological surveys, and other USGS programs such as CUSMAP, Strategic and Critical Minerals, Landslide Hazards, and Earthquake Hazard Reduction that are so strongly dependent on basic geologic mapping.

The Geologic Framework core program includes four major areas of research: (1) geologic mapping, geologic framework, and regional studies, which include geological, geochemical, and geophysical surveys to determine the distribution and properties of both rocks and unconsolidated materials; (2) research associated with continental drilling, seismic imaging of deep geologic structure, and studies of the physics and chemistry of deep crustal materials to provide an understanding of the origin and evolution of the deep continents and the processes that produce ore deposits, geothermal fields, earthquakes, and volcanic eruptions; (3) geologic process studies to determine the modification and redistribution of those materials within and at the surface of the Earth; and (4) studies to establish the numerical and relative ages of these materials in order to determine rates and frequencies of geologic processes. The research in these four major areas is accomplished under the following five components:

Geologic Mapping. Geological surveys delineate the spatial relations of rock materials at or near the surface of the Earth. Geologic maps, in particular, show the distribution of rocks, geologic structures such as faults and folds, and the age relations of rocks and structures. Geologic mapping provides more comprehensive information about the Earth's surface than any other of the various types of surveys and, to varying degrees, forms the foundation for nearly all other research done in the earth sciences. Thus, the geologic map constitutes the most versatile geologic data base for areal geologic information in the earth science community. Analysis of responses from the nationwide survey of users of geoscience information conducted by the National Research Council indicates that large-scale, general purpose geologic maps are the products most in demand by this constituency and are likely to remain so far into the future. Combined with geophysical measurements, such as seismic reflection profiling, variations in gravity, and the local magnetic and electrical fields, information from geologic maps can be projected to infer the distribution, structure, and shape of rock bodies to great depths within the crust. Data from drill holes, where available, may be used to augment these other data sources to produce geologic synthesis of broad regions. This baseline information is depicted on large and small-scale geologic maps which show the distribution and relations of rocks at the surface and at various depths. As the basic data sources for most mission programs, many of these maps also show the distribution of surficial materials or unconsolidated deposits, which are of crucial interest in assessment and development of water resources, engineering and land-use applications, as well as local resource assessment.

Regional geologic and geophysical studies are a crucial part of mineral and energy resource evaluations, and earthquake and landslide hazard studies, greatly contributing to identification and understanding of geologic features and processes that may impact safe siting and operation of energy producing plants, schools, hospitals, and other critical facilities.

Recent program accomplishments within this component include:

- Geologic mapping of three quadrangles in northwestern Utah have identified a major west dipping thrust fault that has now been traced for about 20 km. The thrust fault, and major folds associated with it, suggest a thrust belt-type evolution in northwestern Utah, and the possibility of oil and gas traps that are formed in this type of environment. Detailed biostratigraphic studies underway, using the framework established by the geologic mapping, are beginning to define the complex changes in the region. The geologic map and biostratigraphic studies used in conjunction with one another will serve as a predictive tool for oil and gas explorations.

- A recently prepared report, with coauthors from four other nations, relates the major bends in the Appalachian Mountains to a particular type of continental rifting that occurred when North America was pulled apart from North Africa and Europe over 200 million years ago. The report clarifies the origin of major segments of the land masses on all three continents. Thorough understanding of the boundaries between these land masses, or terranes, and detail analysis of the rift basins formed during the pull-apart, are basic to exploration for oil, gas, and strategic and critical minerals.

- A study has recently been completed and published establishing the interrelationships of several individual terranes previously thought to have been accreted to the North American continent. Geologic mapping and paleomagnetic and stratigraphic studies indicate that rotations of the terranes are due to simple shear and extension, and are probably not related to terrane accretions. These findings have important implications for paleogeographic reconstructions, and for oil, gas, and mineral exploration, which is partly based on those reconstructions.

- Geologic mapping of the Swak River quadrangle in northern Washington, has delineated a fault separating two terranes that were accreted to the North American continent more than 70 million years ago. The fault, in addition to its relationship to possible mineral deposits, is important because it appears to have influenced the ascent of magma which produced the currently dormant Glacier Peak volcano.

- The first geologic map in a series of maps and reports on Yosemite National Park was recently published. The geologic map was made over 50 years ago, and is published with only minor updating. It is of historic value as well as being a source of scientific information and an informative, understandable portrayal of the geology for the interested lay person visiting the park. Other products soon to be released in this series include: (1) a report entitled "The Geologic Story of Yosemite Park", (2) a map of the glacial geology and history of Yosemite, (3) an oblique pictorial map of the park, and (4) an oblique map of the park showing the Tioga glaciers that formed the spectacular scenery found in Yosemite today.

The Federal/State Cooperative Geologic Mapping Program (COGEOMAP). This component consists of general purpose geologic mapping as well as the production of digital geophysical maps in areas of mutual interest to the USGS and State geological surveys. COGEOMAP contributes to the national geologic map data base that provides the foundation for evaluating basic geologic framework on a regional scale in addition to applied studies directed at evaluating geologic hazards (earthquake, ground failure, and volcano) and assessing mineral resources.

Specific types of projects that can be supported under the COGEOMAP element include:

1. Intermediate and large-scale (one inch equals one and one-half miles or larger) geologic mapping in areas with high hazard and/or resource potential, but where accurate, up-to-date geologic maps are lacking;

2. Assistance in the planning and preparation of State geologic maps;

3. Mapping projects to clarify the relationship of major geophysical features to geologic structures;

4. Preparation of State geophysical maps utilizing and expanding on existing digital data bases.

The Geological Survey provides geologic data from all parts of the Nation; this mandate cuts across State boundaries and regional geologic provinces. Many State geological surveys also have mandates for providing geologic information and have detailed knowledge of their region and its resources. However, few States have the resources to maintain the specialized expertise maintained by the Geological Survey. Joint-funding agreements with State geological surveys are undertaken in which the USGS fulfills its traditional Federal role of coordination of assistance to the States. Because terrane, resources, and geologic problems of the States vary greatly, cooperative activities differ in each cooperating State. Accordingly, this component of the program provides a means by which both the Geological Survey and State geological surveys may respond more effectively to national and State earth science problems.

Table 1. Summary of proposed and funded geologic mapping cooperatives under the COGEOMAP program in FY 1985 and FY 1986.

($ in thousands)

	FY 1985		FY 1986	
	Funded		Funding	
	State	USGS	State	USGS
Alabama	0	0	58	58
Alaska	111	81	61	54
Arizona	65	65	82	82
Connecticut	10	10	0	0
Hawaii	0	0	35	35
Idaho	0	0	43	6
Illinois	100	100	138	115
Louisiana	0	0	26	4
Maine	7	7	15	15
Maryland	40	65	45	45
Minnesota	41	20	36	20
Montana	0	0	21	17
Nebraska	0	0	26	18
Nevada	0	18	21	18
New Hampshire	10	10	20	20
New Jersey	200	200	293	290
New Mexico	20	20	20	20
North Carolina	0	0	12	12
Oklahoma/Arkansas	190	190	190	190
Oregon	110	110	79	69
South Dakota	0	0	15	15
Tennessee	55	55	55	55
Texas	0	0	41	41
Utah	0	0	30	30
Vermont	6	6	9	9
Virginia	98	25	70	20
West Virginia	0	0	58	58
Wisconsin	0	0	24	24
Wyoming	18	18	18	18
In final negotiation	0	0	TBD	142
Total	$1,081	$1,000	$1,541*	$1,500

*Includes $142,000 for State geophysical maps.

Recent program accomplishments under this component include:

- Completed geologic mapping of two 7 1/2-minute quadrangles in the southern Illinois basin.

- Completed two surficial geologic maps in southeastern New Hampshire.

- Completed a digital geophysical folio of the State of Ohio.

- Completed digital aeroradioactivity maps of the State of New Mexico.

Deep Continental Studies: Determination of the composition, structure, and dynamics of the crust provides information fundamental to the understanding of the origin and evolution of the continents and their resources. With the development of the theory of plate tectonics, the earth sciences are approaching, for the first time, a consistent and comprehensive perception of how the Earth works. The Earth is now perceived as a dynamic convecting body, driven by its internal heat and characterized by horizontal movements at the surface of a small number of rigid plates. Within this framework, a better understanding of the processes and structure of the deep continents is vital to providing society with solutions to many problems--especially those associated with supplies of strategic mineral resources and energy, the disposal of wastes, and the mitigation of earthquake and volcano hazards. Though the theory of plate tectonics has begun to define the potential of the great body of rocks that forms the continental crust, there is a large gap in the knowledge between the fine detail provided by shallow geologic exploration and general, large-scale knowledge of the deeper continents. It is in these deeper zones where many critical mineral deposits form and where earthquakes and volcanoes originate. The potential for rapid progress is particularly strong at this time because of substantial technical advances that have been made recently in electronic field instrumentation and data processing equipment. The ability now exists, for example, to measure stress, strain, and geochemical properties in deep drill holes, to build microprocessor-based portable digital seismographs for 3-dimensional imaging, to collect high-quality seismic reflection and refraction data, and to process it using state-of-the-art techniques.

Deep Continental research is subdivided into four main components in which new data are needed in order to solve long-standing geological problems:

- Mechanisms of Continental Deformation - how strain energy is accumulated through tectonic plate motion and dissipated through crustal deformation and geometric modelling of the heterogeneous structure and composition of the crust and upper mantle at a scale comparable to the true geologic complexity.

- Roots of Hydrothermal-Magma System - drilling to the roots of a fossil volcanic system to provide data of critical importance to the resource evaluation of many strategic minerals and to the understanding of the volcanic-geothermal processes in ore formation.

- Continental Rifting - the geometry, timing, and mechanism of rift formation, the character and distribution of associated mineral deposits, and the relation of rifts to intraplate earthquakes.

- Accretion of Terranes - the study of active subduction zones, major structural boundaries, microplate geometry, large-scale overthrurt belts, and deep sedimentary basins in order to understand how continents grow and how ore deposits and hydrocarbons are formed.

In FY 1986 and FY 1987 these four research areas will be investigated through a carefully coordinated program that includes:

- The conduct of geologic and geophysical research in conjunction with deep drilling projects. These projects constitute the primary participation of the USGS in the Continental Scientific Drilling Program and are coordinated with the National Science Foundation, the Department of Energy, and with a consortium of universities for Deep Observation and Sampling of the Earth's Continental Crust (DOSECC) following guidelines established in an Interagency Drilling Accord. Activities will include drilling and related research at locations such as Cajon Pass, California (near the San Andreas fault), and the Creede, Colorado mineral district, and operation of the national drill-core repository and data information center at USGS Central Regional Headquarters in Denver, Colorado.

- The acquisition and interpretation of seismic reflection and refraction profiles. These surveys will define the structural configuration and deformation mechanism of crustal rocks. In addition, an exciting new method, seismic tomography, will be applied to produce high resolution of the crust in three dimensions. Investigation of large areas that transect major geologic features and the boundaries between them provide an effective method to study major geologic problems using a multidisciplinary approach.

- Studies of the physical and chemical properties of deep continental materials.

Recent program accomplishments within this component include:

- Preparations for contract drilling at Cajon Pass in southern California and in the Creede, Colorado mineral district as part of the Continental Scientific Drilling Program. Funded jointly by the National Science Foundation and USGS, research, including downhole sampling, measurements, and deep-hole monitoring, will be performed to address the composition, structure, thermal character, and evolution of selected areas of the Earth's continental crust.

- Seismic refraction, reflection, gravity, magnetic, and geologic data collected in the Trans-Alaska Crustal Transect Program are defining the composite nature of the lithospheric structure of southern Alaska. The data suggest that the Chugach terrane consists of old oceanic crust and continental igneous rocks underlain by an alternating series of complex rock formations associated with plate collisions, the lowermost of which (as indicated by seismicity) may be associated with the currently subducting plate. Seismic reflection surveys have been made across the Border Ranges fault and the Denali fault, two of Alaska's major fault systems. The north-dipping Border Ranges fault system separates the Chugach and Peninsular/Wrangellia terranes and is interpreted to be a late Mesozoic subduction zone.

- o Combined interpretation of deep seismic reflection and refraction profiles in central California shows that the Franciscan Oceanic terrane has been thrust eastward as a tectonic wedge onto the continental margin beneath the west side of the Great Valley, in radical contrast to the subduction zone model of prevailing views. Reflection data suggest that thrusting within this tectonic wedge was responsible for the May, 1983 Coalinga, California, earthquake.

- o In the Pacific-Arizona Crustal Experiment (PACE), evidence for 2 major provinces in the ancient continental crust of southern California and Arizona was found through study of lead isotopes in young granites melted from older crust. Geologic and paleomagnetic data suggest that a single Tertiary volcanic ashflow spread more than 200 miles between the central Mojave Desert and the Colorado Plateau. Over 2,000 chemical analyses of Arizona volcanic rocks were computerized and graphed to compare volcanic fields in the regional synthesis of Tertiary-age volcanism.

Geologic Process Studies. Natural geologic processes that operate at the surface and within the Earth have formed the rocks that make up the crust, and are responsible for the current and changing distribution of the rocks formed. Accurate knowledge of these processes is vital to a modern technological nation, not only because they are responsible for the formation of our mineral and energy resources, but because they are the direct cause of earth related natural hazards. These processes include: volcanism; erosion, movement, and deposition of sediment; plutonic processes that form granitic bodies; tectonic processes such as folding of strata and movement along faults; and glacial processes. Specific geologic processes are responsible for ore formation; sediment accumulation and subsequent petroleum generation, migration, and accumulation; fault movement causing earthquakes; generation of magma and subsequent volcanic eruptions; and changes in climate. Study and understanding of geologic processes is the key to accurate mineral and energy resource assessment and prospecting, prediction and mitigation of geologic hazards, and formulation of wise resource development and land-use policies.

Recent program accomplishments within this component include:

- o A multi-disciplinary study of sedimentary rocks in New Mexico, deposited in a relatively short time span about 66 million years ago, furnishes important new information on the world-wide mass biological extinctions that occurred then. This short time span is referred to as the Cretaceous-Tertiary boundary. Detailed study of fossil pollen and spores from these rocks indicates that the presence of fossil pollen from most plants ceases or is drastically reduced at the boundary, and is replaced in rocks above the boundary by vast quantities of fossil fern spores. From past studies of catastrophic volcanic eruptions, such as Krakatoa, in which all life in the devastated region is destroyed, it is known that ferns are the first plant type to repopulate the area. Evidence of a massive volcanic eruption is lacking at the Cretaceous-Tertiary boundary, but the presence of unusual amounts of iridium, a metal abundant in meteors, has been the basis for suggesting a massive meteor struck the earth at this time. The exact concidence of the fern spore anomaly and iridium anomaly supports this theory.

- An extensive body of paleomagnetic data (paleomagnetic studies involve measurement of the positions of the Earth's magnetic pole as it existed in the geologic past) obtained from measurements on volcanic and sedimentary rocks ranging from about 40 to 140 million in age, indicates that the rocks of Puerto Rico formed about 10° south of the equator, almost 2,000 miles from their present location. Sometime after 60 million years ago, they were moved northward, rotated 90°, and moved eastward; the combined movements forming the Carribbean basin.

Geologic age studies. Knowledge of geologic history and the age of rocks and sediments is basic to an understanding of the geologic framework of an area. The ability to date geologic deposits accurately is also critical to understanding the natural processes by which they formed, and to correlate with deposits in nearby areas and in other parts of the world. Geologic process studies are dependent on the dating of geologic materials in order to establish the timing of such things as ore formation; sediment accumulation and petroleum generation; latest fault activity; frequency of volcanic eruptions; earthquake frequency; and rate of climate change. Determination of age is based on the decay of suitable radioactive elements present in rocks and minerals; relative ages are commonly established by studies of fossil plants and animals contained in rock strata. Studies to provide this information and to improve techniques for dating and correlation are, therefore, an essential part of this program.

Recent program accomplishments within this component include:

- Approximately 3,500 mammal fossils have been collected from Eocene-age rocks (about 40 to 60 million years old) in the Big Horn Basin, Wyoming. Along with other fossils collected from these rocks, they have been linked to extensive collections at Yale University. The combination of these two collections has resulted in the best age control in the world on a group of rocks using vertebrate fossils (bones). Age control of this sort is critical to oil and gas exploration in the Big Horn Basin.

Planned Workload

	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Transect studies				
Seismic reflection and refraction surveys	6	10	11	11
Geologic Studies	7	10	10	10
Geophysical Studies	2	5	5	5
Heat Flow Studies	0	1	2	2
1:250,000 mapping project	7	7	7	6
1:100,000-scale mapping project	6	6	6	5
Special Studies related to:				
Properties of geologic materials	15	15	17	17
Relative and isotopic age of earth	52	52	52	48
Geologic processes bearing on tectonic and regional framework	69	67	67	65
Drill hole studies to make downhole measurements and sample analyses	0	1	2	2
Drill core repository and curatorial projects	0	1	2	2
Federal/State Coop Mapping projects	21	30	30	21

Estimated subcomponent cost (in thousands):

	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Geologic Mapping	5,000	5,160	5,025
Geologic process studies	5,972	6,087	5,822
Geologic age studies	4,000	4,180	4,015
COGEOMAP	1,500	1,000	1,000
Deep Continental studies	3,000	3,134	3,000
	19,472	19,561	18,862

Decrease for FY 1987

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Change
$	19,561	18,862	-699
(FTE-T)	(360)	(360)	(--)

Of the $699,000 decrease proposed, $500,000 will be accomplished by curtailing several COGEOMAP cooperative projects and by not replacing completed projects with proposed new starts. As a consequence, some States probably will carry forward research on their part of these cooperative projects without

Geological Survey participation and support at a slower rate, while others will postpone projects until Geological Survey participation becomes available. The remaining $199,000 of the decrease will be accomplished by reduced funding to four internally conducted geochronology projects supporting COGEOMAP and other programs.

Distribution of change by object class

The object class detail for the $699,000 decrease is as follows:

	Amount
Travel and Transportation of Persons	$27,000
Transportation of Things	25,000
Communications, Utilities, and Miscellaneous Charges	76,000
Printing and Reproduction	20,000
Other Services	312,000
Supplies and Materials	119,000
Equipment	120,000
Total	$699,000

Geomagnetism

Objectives:

- To perform geomagnetic measurements to infer the properties of the Earth's interior and the region surrounding the Earth.
- To conduct research on secular variation, conductivity of the crust and mantle, short and long wavelength magnetic anomalies, ionospheric and magnetospheric sources, and methods to improve charting of the magnetic field.
- To compile and publish periodic revisions of the U.S. and world magnetic charts and to disseminate detailed magnetic information to the public and to World Data Centers.

Base Program:

The Geological Survey operates 11 magnetic observatories, makes continuing magnetic field surveys, and works with NASA and the Department of Defense to obtain new satellite data to help with the worldwide data collection program. The observatories are located in Fredericksburg, Virginia; San Juan, Puerto Rico; College, Sitka, and Barrow, Alaska; Guam; Tucson, Arizona; Boulder, Colorado; Newport, Washington; Fresno, California; and Del Rio, Texas. Data from these observatories, from the National Oceanic and Atmospheric Administration observatory at Hawaii, a State operated observatory at Tulsa, Oklahoma, and from about 250 field sites throughout the United States and its territories where measurements are taken at periodic intervals, are necessary to the program's charting responsibility. The Federal agencies depend on the use of USGS geomagnetic data to meet legislated missions. Values of the magnetic declination are used on charts and maps produced by various Federal agencies, including the topographic maps of the Geological Survey, and the navigational charts produced by the National Oceanic and Atmospheric

Administration and the Federal Aviation Administration. The data are also used by surveyors to retrace old boundaries and to settle court disputes. Other practical uses include determination of the attitude of many spacecraft. The geomagnetic data provide the basis for interpretation of aeromagnetic anomaly maps used in exploration for fossil fuels, geothermal energy, and minerals, and in studies of the Earth's internal physics and geologic structures associated with earthquakes and volcanoes.

Important recent accomplishments of the Geomagnetism Program include:

o Modernization of all Geological Survey magnetic observatories with automated digital instrumentation. Observatory data can now be telemetered directly to a central office for diagnostic evaluation, reducing data loss.

o Initiation of surveys to identify magnetic induction anomaly factors. Induction anomalies affect interpretation of satellite and exploration survey data, and magnetic data processing, analysis, and interpretation.

o Preparation of an update of the International Geomagnetic Reference Field (IGRF). The new IGRF is being reviewed by the International Association of Geomagnetism and Aeronomy for adoption worldwide.

o Development of models of atmospheric electric currents that cause daily magnetic field variations about North America. Using these models, the conductivity of the deep, subcontinental Earth (between 150 and 600 km) has been determined. The new models are now being applied in Europe in the study of regional conductivity in other parts of the globe.

o A refutation of the assertion made by European scientists that a rapid change in the magnetic field occurred worldwide in 1969. This determination has important consequences regarding secular variation, mantle conductivity, and dynamo characteristics, and is now a point of major international debate among Earth scientists.

o A very high degree model of the geomagnetic field has been constructed using combined MAGSAT and surface observatory data for epoch 1980. This is the most detailed representation of the field yet derived.

Plans for program activities at the base level for FY 1987 include:

o Operation and maintenance of all 11 U.S. Geological Survey geomagnetic observatories. Observatory data will be processed and furnished to specialists and to the public.

o 25 repeat magnetic surveys in the Midwest and western Central States to update magnetic charts, maps, and models. The surveys augment observatory measurements that track long-term changes in the Earth's magnetic field.

Magnetic induction surveys at 3 U.S. geomagnetic observatories, and in the Rio Grande Rift (Colorado, New Mexico, Texas), Mid-Continent Rift (Central States), and along the coast of Maine.

- **Continued revision of International Geomagnetic Reference Fields models.**
- **Collection and analysis of geomagnetic data to compile and publish new World Magnetic charts and to update magnetic field strength and declination maps.**
- **Maintenance of 6 research projects designed to develop new methods and instrumentation for analysis of satellite and surface magnetic data, to predict secular changes in the Earth's magnetic field, to determine if changes are required in the International Geomagnetic Reference Field, and to determine the electrical and conductivity properties below the Earth's crust.**
- **Initiation of studies using arrays of magnetometers to improve geophysical interpretation of subsurface geology by use of magnetovariation and magnetotelluric studies particularly as related to the Earth's crust and mantle.**

Planned Workload

		FY 1987	FY 1987	
	FY 1985	FY 1986	Base	Estimate
Geomagnetic Observatories	11	11	11	9
Repeat Field Surveys	25	25	25	12
Magnetic Induction Surveys	3	6	6	3
Research Projects	6	6	6	5

Estimated average unit costs for planned workload in FY 1987:

Geomagnetic Observatories--------------11 @ $110,000
Repeat Field Surveys--------------------25 @ $ 4,000
Magnetic Induction Surveys--------------6 @ $ 23,000
Research Projects------------------------6 @ $117,000

Decrease for FY 1987

(dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Change
$	2,157	1,629	-528
(FTE-T)	(31)	(31)	(--)

The Geomagnetism Program will be reduced by approximately one-fourth in FY 1987. Geomagnetic observatories at Newport, Washington, and at Barrow, Alaska, will be closed, and a project in geomagnetic instrumentation development will be discontinued. Repeat magnetic field surveys will be reduced by one-half, including field surveys in Michigan (2) , Ohio (2), Illinois (2), Indiana (1), Missouri (2), Wisconsin (2), Iowa (1), and in Minnesota (1). Magnetic induction surveys at the Fredericksburg, Virginia, the San Juan, Puerto Rico, and the Barrow, Alaska, geomagnetic observatories also will be postponed. Reductions in data collection and analysis will delay the availability and quality of magnetic data required for production of navigation charts and in exploration surveys.

Distribution of change by object class

The object class detail for the proposed $528,000 decrease is as follows:

	Amount
Travel and Transportation of Persons	$21,000
Transportation of Things	19,000
Communications, Utilities, and Miscellaneous Charges	57,000
Printing and Reproduction	15,000
Other Services	235,000
Supplies and Materials	90,000
Equipment	91,000
Total	$528,000

Climate Change

Objectives: To establish the long-term history of the rates, frequencies, and magnitudes of climate change through studies of the geologic record; to determine the effects of climate change on natural resources; and to develop and improve techniques for delineating climate history.

Base Program: The Geological Survey's Climate Change program was developed in response to P.L. 95-367, the "National Climate Program Act." The Geological Survey's program is conducted in close cooperation with the National Climate Program Office in the National Oceanic and Atmospheric Administration. The program emphasizes studies of the geologic record to establish the long-term history of the rates, frequencies, and magnitudes of climate change. Studies of long and continuous records receive priority, as these studies are important for delineating the reasons and mechanisms for climate change.

The climate program provides prehistoric geologic information bearing on the natural variability of past climate. This information is necessary to assess if, or how much, man's activities are influencing natural patterns of climate change. The climate program provides a geologic data base that can test the results of numerical models seeking to predict changes in climate due to future man-induced or natural changes within the climate system.

Principal activities under this program that will be emphasized in FY 1987 base program include:

- Continue study of times and magnitudes of past atmospheric CO_2 variation using stable mineral phases, isotopes, compilations of carbon reservoir magnitudes, and other criteria; and to establish and test carbon cycle models. Information from these CO_2 and carbon cycle studies are necessary for evaluating possible future global climate change associated with man-induced increases in atmospheric CO_2.

- Continue study of sediment sequences in lakes and other depositional areas that record extraordinarily detailed climate variations through time. Examples of things that record climate change include study of microfossils and geochemical and isotopic changes in sediments.

- o Continue investigations of the effects of climate change on continental margins. For example, climate induced changes in sea level and ocean current patterns near continental margins strongly influence the productivity of coastal waters and nature of the sediments and minerals deposited on the continental shelf and slope.

Significant recent results include:

- o Paleomagnetic and radiometric studies of a long sediment core from Tulelake, California have established that the core contains a climatic record extending back for 3.2 million years. The chronology is aided by identification of several ash layers in the core that can be correlated to well-known and well-dated ash layers occuring throughout the northwestern United States. Current work on the core involves developing a detailed climate record by study of pollen and other fossils found in the sediment. Study of the upper 25 meters of the core is being emphasized because that interval contains a record of the last full climatic cycle.

- o Recent investigations have established that the Earth's climate and carbon cycle are intimately coupled. Not only has the carbon cycle influenced climate through natural changes in atmospheric CO_2, but climate change appears to be capable of altering the carbon cycle, including atmospheric CO_2. This interaction occurs in short-term and long-term cycles, emphasizing the need for geologic investigations to determine natural variability of the carbon cycle in order to evaluate how much influence human activities have on climate change.

- o Initiated multidisciplinary study of cores from Walker Lake, Nevada. Future climate change has important implications for formulating radioactive waste disposal plans in arid regions of the western United States. In response to this problem, the Climate Change Program has directed technical expertise to paleoclimatic studies of cores taken from Walker Lake. Paleoclimatic studies of cores from Walker Lake and other areas of Nevada will provide a data base for predicting effects of future climate change in this area. The paleoclimate work in Nevada supplements and is coordinated with the Department of Energy's investigations of southern Nevada.

	Planned Workload			
	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
CO_2 research	1	1	1	1
Core analysis	6	6	6	6
Continental margin studies	1	1	1	1
Total Projects	8	8	8	8

Estimated average unit cost for planned workload in FY 1987:

Research projects-------------8 @ approximately $125,000 each

Justification of Program and Performance

Activity: Geologic and Mineral Resource Surveys and Mapping
Subactivity: Mineral Resource Surveys

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Alaska	$	10578		0	0	0
	FTE-T	136		0	0	0
Conterminous States	$	5782		0	0	0
	FTE-T	136		0	0	0
Mineral Resources of Public Lands	$	8492		0	0	0
	FTE-T	108		0	0	0
National Mineral Resource Assessment Program	$	0		24965	20207	-4758
	FTE-T	0		380	361	-19
Strategic and Critical Minerals	$	9188		9231	9231	0
	FTE-T	135		135	135	0
Development of Assessment Techniques	$	12538		12595	12595	0
	FTE-T	303		303	303	0
Total Requirements	$	46578	44575	46791	42033	-4758
	FTE-T	818	818	818	799	-19

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
46,578	-2,003	44,575

As a result of a $2,003,000 reduction in the Mineral Resource Surveys subactivity, initiation of a multidisciplinary study of the Bethel 2-degree quadrangle in Alaska will be deferred, along with reduced effort on regional mineral resource surveys of the Challis, Toiyabe, and Deerlodge National Forests.

Authorization

43 U.S.C. 31(a)	The Organic Act of 1879, authorizes the Geological Survey to conduct "an examination of the geological structure, mineral resources, and products of the public domain." The basic authority has been amended to authorize mineral resource studies outside the national domain.
50 U.S.C. 98 P. L. 96-41	The Strategic and Critical Materials Stock Piling Act of 1946 as amended by its Revision Act of 1979. Section 8 of the Act supports the Survey's programs for assessment of domestic minerals, especially for strategic and critical minerals, to complement the Federal mineral stockpile program.
16.U.S.C. 1131 P.L. 88-577	The Wilderness Act of 1964 and numerous subsequent related Acts require that the Geological Survey and Bureau of Mines assess the mineral resources of each area proposed as wilderness or established as wilderness. The studies are to be on a planned and recurring basis.
30 U.S.C 21(a) P.L. 91-631 30 U.S.C. 1601 *et seq.* P.L. 96-479	The Mining and Minerals Policy Act of 1970, and the Materials and Minerals Policy, Research and Development Act of 1980, reemphasize the Survey's responsibility to assess the mineral resources of the Nation.
16 U.S.C. 1600 *et seq.* P.L. 94-588 P.L. 95-306	The National Forest Management Act of 1976 (as amended 1978), and the Renewable Resources Extension Act of 1978. The Geological Survey is a party in a five-agency agreement calling for the assessment of all resources on Federal land.
43 U.S.C. 1701 P.L. 94-579	The Federal Land Policy and Management Act of 1976, specifically requires that the Geological Survey and Bureau of Mines do a wilderness mineral survey by 1991 of each area BLM recommends for wilderness suitability.
16 U.S.C. 3141-3150 3161	The Alaska National Interest Lands Conservation Act of 1980. Section 1001 of the Act requires that the Geological Survey will assess the mineral potential of Federal lands north of 68° North latitude, east of the National Petroleum Reserve, and west of the Arctic National Wildlife Refuge, and participate in a review of the wilderness characteristics of the area. Section 1010 of the Act requires that the Secretary of the Interior, who has delegated the responsibility to the Geological Survey, expand the minerals data base for all public lands in Alaska. Section 1011 of the Act requires an annual minerals report be presented to Congress; the preparation of this report has also been delegated to the Geological Survey.

The Mineral Resource Surveys subactivity consists of three interrelated elements designed to meet the following objectives:

- Provide timely and credible assessments of the Nation's mineral resources on which to base foreign and domestic policy decisions and to aid in long-range decisions related to mineral supply.
- Assess the mineral resource potential of specified land areas in the United States, particularly public lands, for resource management, land use policy, and Congressional action and for identification of targets for industry exploration.
- Identify mineral deposits that will increase the domestic mineral supply, particularly for the strategic and critical minerals.
- Improve current methodology and develop new techniques for identifying and evaluating mineral resources and analyzing resource data more efficiently and with greater precision.
- Protect the Government's interest in mineral properties explored with Federal financial assistance.

National Mineral Resource Assessment Program

Objectives: To provide a comprehensive, modern assessment of the known and inferred mineral resources of the conterminous United States and Alaska to determine areas that have significant mineral potential; and to provide mineral resource information for planning the use of public lands, including how land-management decisions affect the Nation's total resource base. The program has two components: Regional Studies and Mineral Resources of Public Lands. Depending upon the nature of the legislative or administrative requirements, the investigations are conducted at various scales and provide mineral resource information at the appropriate levels of detail.

Regional Studies

Base Program: The regional studies component of the National Mineral Resource Assessment Program operates at four interactive levels of progressively greater detail. Level I studies produce statewide and multistate syntheses of the mineral resources of Alaska and the conterminous United States from the published literature. Level II studies of mineral provinces are produced at 1:500,000 to 1:1,000,000 scales from the published literature and from completed Level III studies. They include tabulations of geologic characteristics of mineral resources and summary maps of favorable provinces. The major emphasis of the National Mineral Resource Assessment Program presently is studies of 1:250,000-scale quadrangles. These Level III studies are carried out by multidisciplinary teams of geologists, geochemists, geophysicists, and mineral economists in order to produce a quantitative, probabilistic mineral resource assessment for each quadrangle. Level IV studies include detailed basic research projects on specific areas, including mining districts or particular mineral deposits, or technical topics that will aid in determining the setting and character of mineral resources and, through analogy, the probability that similar deposits exist elsewhere in a geologic province or region.

The systematic Level III mineral resource assessments made under the National Mineral Resource Assessment Program provide critically needed, up-to-date information for use in national mineral policy decisions and for land-use decisions at the Federal, State, and local levels. These are the only studies (by industry, academia, the states, or the Federal Government) that provide rapid, comprehensive, state-of-the-art assessments of areas known or inferred to be the most favorable for the occurrence of mineral resources over all Federal, State, and private lands throughout the country. The assessments constitute reliable mineral resource information for developing national mineral policy decisions with regard to domestic and international strategic and critical mineral supply. In addition, Federal, State, and local governments increasingly require resource information derived from these studies for land-use and land management decisions required by legislative actions pertaining to government lands (including Indian, acquired Federal, and State-owned lands).

Principal criteria considered in selecting quadrangles for study include: (1) favorability for the occurrence of strategic and critical minerals; (2) presence of mineralized Federal or Indian lands, with inferred mineral potential; (3) site-specific areas that will require study in the near to intermediate future, especially for wilderness and other land-planning efforts of Federal agencies; and (4) recommendations of State Geologists and cooperative funding/staffing agreements with State Geological Surveys. Several additional factors that are considered include the amount of previous work, the type and magnitude of the mineral resource, and the cost and complexity of obtaining necessary new data.

Level III studies are basically field studies and are considered to be the minimum level of study to produce a credible modern mineral resource assessment; each quadrangle requires 3 field seasons. All existing pertinent geoscience and resource data are compiled, and new data are gathered utilizing a variety of geologic, geochemical, geophysical, and remote sensing techniques. These data are interpreted and synthesized using geologic and mineral occurrence models to produce an assessment of the quadrangle including, where possible, probablistic estimates of the number, size, and character of deposits that may occur within the quadrangle. Where possible, USGS-State geological survey cooperative projects are carried out. This broad spectrum of information is made available to users in the form of a folio that includes geologic, geochemical, geophysical, and mineral resource maps and interpretative reports. The folios identify areas with notable mineral potential that merit further evaluation.

In FY 1986, the Geological Survey is formally coordinating its work on five quadrangles in the conterminous United States with the Geological Surveys of Arkansas, Georgia, Idaho, Kansas, Missouri, Minnesota, Nevada, South Carolina, and Utah. In Alaska, coordination of work in two quadrangles will continue with the Alaska Division of Geological and Geophysical Surveys.

In FY 1987, two new starts will be selected from among the Knoxville (TN-NC, Lake Champlain (NH-NY-NJ), Paducah (IL-KY-MO), or Prescott (AZ) quadrangles. In addition, the regional studies component is specifically designed to complement and support the Mineral Resources of Public Lands component of the program. The two components nominally address different needs and generally are at different scales: much of the regional studies component is a 1:250,000 national effort with a relatively longer timeframe for completion; the Mineral Resources of Public Lands component responds to the needs of the Federal agencies that manage public lands for information at various scales depending on the issue being addressed and the size of the land area that will be affected. Many of these studies are analogous to Level IV studies in the amount of detail required to complete them, and they produce specific assessments of small, often irregular-shaped tracts of land under short deadlines or statutory requirements (such as wilderness suitability decisions). All levels of the regional studies, if available, allow the Survey to respond to the requirements of Federal agencies on specific tracts of land more quickly and effectively.

In FY 1986, the Geological Survey is coordinating its work in the Livengood and Circle quadrangles with the State of Alaska to accelerate mineral resource surveys of the Steese and White Mountains areas that will provide the Bureau of Land Management with improved mineral information prior to BLM's deadline for developing land-use plans for the two areas. In FY 1987, two new starts will be selected from among the Bethel, DeLong Mountains, Table Mountain, or Teller quadrangles of Alaska.

Recent accomplishments in the regional studies component in Alaska include:

- A public meeting in Anchorage, Alaska, in March 1985, to present results of resource assessment studies on the Seward Peninsula and the status of continuing studies in the western Brooks Range.

- Completion in FY 1984 of a regional mineral resource assessment of southeastern Alaska, a region that contains numerous varied deposits and is the focus of much industry exploration and pre-development activity.

- Publication of hundreds of reports on Alaska's mineral resources, many of which have been widely used by explorationists and land planners.

- Identification of numerous areas of mineral potential, including discoveries of a major extension of the belt of rocks which host copper-base metal massive sulfide deposits in the Brooks Range; an extension of rocks which host massive copper-base metal sulfide deposits in the eastern Alaska Range; asbestos and tin-tungsten deposits in the Yukon-Tanana region; a belt of massive zinc-lead-silver sulfide deposits and areas with potential for molybdenum, beryllium, and copper in southeastern Alaska; and numerous base metal-barite deposits all along the northern flank of the Brooks Range.

Some of the highlights of regional studies in the conterminous United States are:

- More than 400 publications have received wide approval and are being used in the exploration industry and in public land-use planning.

- Component data maps of the Charlotte quadrangle, North Carolina and South Carolina; Iron River quadrangle, Michigan; Medford quadrangle, Oregon; Silver City quadrangle, New Mexico and Arizona; Richfield quadrangle, Utah; Walker Lake quadrangle, California and Nevada; and Wallace quadrangle, Montana and Idaho are published or in press.

- Final reports are in preparation for the Ajo quadrangle, Arizona; Butte quadrangle, Montana; Challis quadrangle, Idaho; Dillon quadrangle, Montana; Glens Falls, New York, Vermont, and New Hampshire; and the Sherbrooke and Lewiston quadrangles, Vermont, New Hampshire, and Maine.

- Public meetings have been held with representatives from industry, universities, and the State and Federal governments for the preliminary release of data and discussions of the mineral assessment studies in the Springfield quadrangle, Missouri (Springfield-November 1985), and for planning cooperative projects with the State geological surveys of Illinois, Kentucky, and Missouri in the Paducah quadrangle.

- New areas favorable for porphyry and vein-type copper and molybdenum occurrences were outlined in the Silver City quadrangle, New Mexico and Arizona, as well as vein and replacement gold, silver, lead, zinc, tungsten, and beryllium, and vein and sedimentary uranium occurrence.

- Areas favorable for the occurrence of a variety of gold, silver, copper, molybdenum, and tin resources were outlined in the Walker Lake quadrangle, California and Nevada. Most significant was the delineation of areas favorable for the occurrence of large, low-grade gold deposits.

- In the Wallace quadrangle, Idaho and Montana, new areas favorable for the occurrence of large lead, zinc, and silver deposits were identified, as well as occurrences of platinum-group metals, gold, molybdenum, and tungsten.

Regional Quadrangle Studies - Folios Published or in Press through FY 1986

Conterminous United States

Ajo, AZ
Butte, MT
Challis, ID
Charlotte, NC, SC
Choteau, MT
Dillon, MT
Iron River, MI, WI
Lewiston, VT, NH, ME
Medford, OR
Pueblo, CO
Richfield, UT
Rolla, MO
Sherbrooke, VT, NH, ME
Springfield, MO
Silver City, AZ, NM
Walker Lake, CA, NV
Wallace, ID

Alaska

Ambler River
Anchorage
Bendeleben
Big Delta
Blying Sound
Bradfield Canal
Chandalar
Chandler Lake
Chignik
Circle
Goodnews
Hagemeister Island
Healy
Karluk
Ketchikan
Lake Clark
McCarthy
Medfra
Mount Hayes
Nabesna
Petersburg
Philip Smith
Prince Rupert
Seward
Solomon
Survey Pass
Sutwik Island
Talkeetna
Talkeetna Mountains
Tanacross
Ugashik
Valdez
Wiseman

Regional Quadrangle Studies - Quadrangles Under Study FY 1986
Conterminous United States

Delta, UT
Glens Falls, NY, VT, NH
Greenville, GA, SC
Hailey, ID
Harrison, MO, AR
Joplin, MO, KS
Redding, CA
Reno, NV
Roseau-International Falls, MN
Tonopah, NV

Alaska

Baird Mountains
Craig
Dixon Entrance
Gulkana
Alaska Peninsula
Iditarod
Juneau
Killik
Livengood
Mount Katmai
Naknek
Port Moller
Stepovak Bay
Taku River

Planned Workload

	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Quadrangles Published or Scheduled for Publication (cumulative)	45	50	53	53
Folios in Preparation	5	3	5	5
Quadrangles under study (incl. new starts)	20	22	21	21
Public Meetings	2	2	2	2
New starts	4	5	4	4
Topical projects				
Areal mineral resources assessments	19	19	19	19
Areal energy resources assessments	7	7	7	7
Framework or process studies	9	9	7	7
Exploration geochemistry	10	10	10	10
Exploration geophysics	21	21	21	21
Isotopic and radiometric studies	7	7	9	9
Stratigraphic correlation studies	8	7	6	6
USGS-State coop. studies underway	5	5	5	5
USGS-State coop. studies initiated	3	3	3	3

Estimated average unit costs for program outputs in FY 1987:

Folios in Preparation	5 @ $375,000
Field Studies Underway-Number of Quadrangles	17 @ $620,000
New Starts	4 @ $650,000

Mineral Resources of Public Lands

The Mineral Resources of Public Lands component includes geologic, geochemical, and geophysical studies, on a regional and a detailed basis, by multidisciplinary teams of scientists to assess the mineral resources of public lands. The program currently includes mineral surveys of those BLM lands for which a preliminary determination of wilderness suitability has been made, areas of immediate concern to the legislative process that are being requested by the Forest Service, and regional assessments of National Forests.

Bureau of Land Management

The BLM wilderness study program is mandated by the Federal Land Policy and Management Act of 1976 (FLPMA). This program is carried out in coordination with the Bureau of Mines and the BLM under a MOU that established the roles of the three agencies.

FLPMA established a requirement for a wilderness review process on BLM-managed lands, including about 50 tracts of some 2.36 million acres in the California Desert Conservation Area (CDCA), and required that the Geological Survey and Bureau of Mines do a mineral survey of each area proposed by BLM for wilderness. The deadline for the Secretary to make his final recommendations to the President is October, 1991. Ultimately between 10-12 million acres will require mineral surveys. BLM will have identified all the areas requiring mineral surveys by the end of FY 1986. General schedules of the BLM wilderness mineral surveys are provided in the MOU, and detailed schedules are developed yearly by the three agencies. The report format is standardized in USGS Open-File Report 84-787.

The BLM wilderness program in FY 1987 will:

- Continue field studies on 2.3 million acres of areas proposed for wilderness by BLM (outside CDCA).
- Begin field studies on 0.8 million acres.

	Planned Workload (millions of acres)			
	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Field survey starts	2.3	3.3	0.8	0.8
2nd year field survey	2.6	3.3	2.3	2.3
Total field survey (incl. starts)	4.9	6.6	3.1	3.1
Report preparation	0.7	0.6	4.5	0.0
Total under study	5.6	7.2*	7.6	3.1*

Estimated average workload costs:
Field surveys = $1.00 per acre per year
Report preparation = $1.10 per acre per year

*Note: Although the planned workload cannot be accomplished within the FY 1986 and FY 1987 funding levels, present and projected activities of USGS are focused to help achieve the requirements of the Bureau of Land Management.

Forest Service

Under the provisions of the Wilderness Act of 1964 (P.L. 88-577), from 1964 to 1984, the Geological Survey and Bureau of Mines carried out mineral surveys on Forest Service lands. Through FY 1986, about 360 reports will have been published on nearly 800 areas comprising 43 million acres. About two-thirds of the areas studied contain areas favorable for one or more commodities that include base- and precious-metals, critical and strategic minerals and energy resources. Construction materials (sand and gravel or rock suitable for use as dimension stone and aggregate) are present in most areas.

The current mineral surveys requested by the Forest Service are based on their analysis of what is required to meet the statutory forest planning requirements of the National Forest Management Act of 1976 and the Wilderness Act of 1964. The plans must include a determination of the potential for future mineral development, access requirements for mineral exploration and development, and the probable effect of renewable resource planning and management direction on mineral resources and activities. Forest plans are revised on a 10-year cycle. In order for plans to contain cost-efficient management direction, timely and accurate mineral resource information must be available.

Therefore, at the request of the Department of Agriculture, the Department of Interior committed to start mineral surveys on 300,000 acres of priority National Forest System lands in FY 1984 and another 300,000 acres in FY 1985. No funds were budgeted in FY 1984 or FY 1985 for the purpose of initiating mineral surveys on these specific areas. The Forest Service has made available to the USGS a list of inventoried roadless areas in the National Forests for which mineral resource assessment is needed. Prioritized needs will be accommodated in the overall agency mineral assessment program planned by the Geological Survey on a year-to-year basis.

Although the planned workload in FY 1985 could not be accomplished within the FY 1985 funding level of this program, present and projected activities of regional studies in the conterminous United States were focused in FY 1985 to help achieve the overall objectives of the program and to allow the necessary surveys to meet the needs of the Forest Service and statutory requirements of the National Forest Management Act of 1976.

In FY 1984, in cooperation with Forest Service, the Geological Survey made a mineral resource assessment of the San Isabel National Forest in Colorado as a prototype for future mineral resource assessment of other National Forests. The results of this study were published in USGS Bulletin 1638. In FY 1985, at the request of the Forest Service, studies were initiated to assess the mineral resources of the Black Hills National Forest, South Dakota, to provide the necessary mineral information for forest planning as well as for resolution of appeals. The studies have been completed, and a final report is in preparation. The reports on the San Isabel and Black Hills National Forests will be evaluated at a joint Geological Survey/Bureau of Mines/Forest Service workshop to be held in March 1986. The U.S. Geological Survey, Bureau of Mines, and Forest Service are currently developing a coordinated plan to meet the needs and priorities for mineral resource information on National Forest lands.

Planned Workload
(millions of acres)

	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Forest Service				
Detailed Studies				
Field survey starts	0.3	0.0	0.0	0.0
2nd year field survey	0.3	0.0	0.0	0.0
Report preparation	0.0	0.3*	0.3*	0.3*
Total field survey (incl. starts)	0.6	0.0	0.0	0.0
Total under study	0.6	0.3	0.3*	0.3*
Regional studies of National Forests Underway	1.5	7.2[1]*	7.2[1]*	0.0

Estimated average workload costs:
Field surveys = $1.60 per acre per year
Report preparation = $1.10 per acre per year
Regional studies = Ranges from $0.20 to $0.50 per acre per year[2]

[1] Two year efforts

[2] Studies of National Forests can be conducted at substantially lower cost, inasmuch as they can be generated largely from existing data gathered during previous CUSMAP and Wilderness Mineral Assessments that included all three forests.

*Note: Although the planned workload cannot be accomplished within the FY 1986 and FY 1987 funding levels, present and projected activities of CUSMAP are focused to help achieve the requirements of the Forest Service.

Decrease for FY 1987:

	FY 1987 Base	FY 1987 Estimate	Change
$	24,965	20,207	-4,758
(FTE-T)	(380)	(361)	(-19)

The aggregate reduction to the National Mineral Resource Assessment program includes a decrease of $600,000 for State of Alaska assistance to the Geological Survey for mineral surveys of the Steese-White Mountains areas of Alaska, and a decrease of $4,158,000 for mineral surveys of public lands in the conterminous United States. Mineral field investigations of BLM Wilderness Study Areas will proceed as scheduled, and mineral information will be provided in time to meet the Congressionally mandated 1991 deadline. However, in FY 1987, report completion will be deferred but will be accelerated in the following two years to meet the deadline.

Reports will be prepared on Forest Service study areas for which field work is complete (approximately 300,000 acres). Further work for Forest Service will be limited to areas where State-wide Wilderness Bills are pending and where regional mineral assessments are already underway.

Object Class Distribution:

The object class detail for the proposed $4,758,000 decrease is as follows:

National Mineral Resource Appraisal Program	FTE-T	Amount
Personnel Compensation	-19	$558,000
Personnel Benefits		72,000
Travel and Transportation of Persons		161,000
Transportation of Things		148,000
Communications, Utilities, and Miscellaneous Charges		450,000
Printing and Reproduction		121,000
Other Services		1,830,000
Supplies and Materials		704,000
Equipment		712,000
Insurance Claims and Indemnities		2,000
Total		$4,758,000

Program Summary ($ in thousands)

	FY 1985	FY 1986	FY 1987
National Mineral Resource Assessment Program	23,665	24,852	20,207
Regional Studies	15,274	16,360	16,117
Conterminous United States	(5,873)	(5,782)	(6,139)
Alaska	(9,401)	(10,578)	(9,978)
Mineral Resources of Public Lands	8,391	8,492	4,090

Strategic and Critical Minerals

Objectives: To provide comprehensive information on domestic and world resources of nonfuel minerals that are essential to a strong national economy and defense; to develop systems to store, analyze, and present this information in forms needed for mineral-policy planning; and to develop international expertise in strategic and critical minerals to assist in the location and development of adequate and dependable supplies of these commodities.

Base Program: The economy of the United States is highly dependent on nonfuel minerals, many of which are in short supply in this country and several of which are entirely imported. Research on strategic minerals by a cadre of mineral experts and commodity geologists can identify deposits from which these minerals may be produced and can point out areas that are geologically favorable for discovery of as-yet-unsuspected deposits of strategic minerals. A major objective since FY 1984 is the assessment of two diverse geologic settings in the United States for the possible occurrence of unconventional mineral resources.

The program is a part of the implementation of the President's National Materials and Minerals Plan of April 1982. Research in support of this program is designed to facilitate planning and development by industry, and to provide a basis for national mineral policy. The program's focus is on essential minerals needed for industrial growth and national defense and presently known to be in short supply in this country.

Activities to be continued in the base program in FY 1987 are:

- Continue cooperative agreements with the States of Minnesota, South Dakota, Wisconsin, Illinois, Iowa, Nebraska, Missouri, Kansas, Kentucky, Arkansas, and Oklahoma to provide drill-hole, stratigraphic, and geophysical data for the buried basement rocks and overlying sedimentary rocks of the mid-continent region.
- Continue cooperative studies with the States of Virginia, New Jersey, and Connecticut, and the University of Connecticut, Florida State University, and North Carolina State University, to identify and delineate new sources of strategic and critical minerals in the eastern Triassic basins.
- Continue intensive geologic, geophysical, and geochemical studies of the eastern Triassic basins for deposits of strategic and critical minerals. The specific targets include deposits of the Noril'sk type which occur when basaltic magma interacts with sulfur-bearing sediments (deposits of this type are the Soviet Union's most important sources of nickel, cobalt, and platinum). The geologic setting and recently developed petrologic models suggest that other deposit types might be present in the eastern United States, as well, where there has been little exploration based on recently developed concepts.
- Continue the study of mineral potential of the buried basement rocks and overlying sedimentary rocks of the mid-continent of the United States. This area has the potential for large undiscovered deposits of nickel, cobalt, lead, zinc, iron, and numerous other mineral commodities. These rocks are highly productive where exposed in southern Canada and the northern United States but are covered by a few feet to thousands of feet of younger deposits over a wide area in the mid-continent United States. This terrane may have substantial undiscovered mineral resources, but exploration and development of them will require a far better understanding of the areal geology and the application of concepts and tools that are being developed.
- Continue management of loans formerly granted under the Office of Minerals Exploration.
- Assist lead countries in completion of summary reports on cobalt (United Kingdom), graphite (Germany), and vanadium (South Africa) for the International Strategic Minerals Inventory and carry out exchange of commodity records for these commodities as well as tungsten, titanium, and platinum-group elements, and tin.
- Continue commodity research on such strategic and critical mineral commodities as tin, nickel, cobalt, aluminum, manganese, tungsten, fluorspar, tantalum, and barite.

- **Maintain the computerized Mineral Resource Data System (MRDS) to facilitate public and private sector access to strategic and critical mineral-resource information.**

- **Continue scientific exchange with People's Republic of China to gain information through field investigations about layered-type copper deposits (such as that near Dongchuan in Yunnan Province) and the Baiyan Obo rare-earth deposit.**

- **Continue additional international cooperative studies that provide resource information on strategic minerals and identify alternate and secure sources for these minerals.**

Some recent accomplishments of the program are:

- Published as USGS circulars International Strategic Mineral Inventory summary reports for manganese, chromium, phosphate, and nickel. Completed compilation of deposit records for nickel, and continued records for cobalt and graphite. Began compilations for titanium, tungsten, vanadium, and platinum-group elements.

- Continued preparation of a series of 1:1,000,000-scale maps indicating mineral favorability of the basement terrane and the cover rocks within the mid-continent region.

- Conducted training and debriefing sessions for State Department Regional Resource Officers to acquire mineral-intelligence data, including strategic-and-critical-minerals exploration activity; completed preparation of report on exploration activity.

- Continued compilation of map series (1:125,000 scale) showing distribution and classification of basalt and diabase in the eastern Triassic basins by chemical and mineralogical type.

- Continued compilation of gravity, aeromagnetics, geology, lithology, geochemistry, geochronology, mineral resources, and subsurface data in the eastern Triassic basins.

- Convened workshop on geology of early Mesozoic basins in the eastern U.S. at Reston, Virginia in November 1984. Published a USGS Circular 946, on the proceedings of the workshop.

- Convened in September 1985 a one-week workshop jointly sponsored by the USGS and the Geological Survey of Canada at which scientists and land-managers from Federal agencies and private industries discussed techniques and objectives of mineral-resource-assessment studies by the U.S. and Canada.

- Conducted cooperative investigations with geologists from the People's Republic of China and acquired new information and first-hand field observations of the world's largest tin-tungsten deposit in southern China, as well as porphyry copper and porphyrite iron-ore deposits in the People's Republic of China. An exchange agreement for analytical standards was established.

- **The Geological Survey, in cooperation with USAID, Los Alamos National Laboratory (DOE), Bureau of Reclamation, and Bureau of Mines, held a workshop in Guatemala (April 1985) on the assessment and development of mineral, energy, and water resources, and the reduction of geologic hazards in Central America.**

- **The Geological Survey, in cooperation with Los Alamos National laboratory (DOE), developed plans for mineral resource studies in Costa Rica.**

	Planned Workload			
	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Inventory of Strategic and Critical Minerals				
-Compile records on major deposits of selected commodities	150	130	130	130
-Complete summary commodity reports	2	2	2	2
Regions under investigation	2	2	2	2
-Develop cooperative programs with State agencies	20	20	20	20
-Regional thematic maps	5	5	5	5
Commodity projects	80	80	80	80
Mineral Resource Data System	1	1	1	1
International Mineral-Resource Appraisals	2	2	2	2

Estimated unit costs in FY 1987:

Projects------------------------89 @ approximately $103,000 each

Development of Assessment Techniques

Objectives: To develop concepts and techniques to improve the capability to identify and evaluate mineral resources.

Base Program: The Development of Assessment Techniques Program conducts basic and applied research on the origin and the geological, geochemical, and geophysical expressions of mineral deposit systems. The program supports multidisciplinary field and laboratory studies directed toward understanding the processes by which mineral deposits are formed and developing new technology and models to assess mineral resources in areas of concealed deposits.

Specific activities of the program include: (1) studies of topical problems in ore genesis related to resource accumulation that exploit the capabilities that can be brought to bear by multidisciplinary groups; (2) field and laboratory studies of the factors controlling mineral deposition in known mineral districts; (3) investigations leading to recognition and study of the genesis of unconventional sources for mineral resources; (4) geochemical studies of the trace-element distribution in mineralized areas; (5) laboratory studies of ore minerals and their host rocks; (6) generation of fundamental thermochemical data on hydrothermal systems; (7) studies to increase the understanding and interpretation of geochemical and geophysical information as applied to resource assessment and for the discovery of new resources; (8) improvements in geochemical instruments and techniques to be used both in the laboratory and the field; and (9) development of new types of geophysical and remote sensing equipment. Concepts and techniques developed or refined as a result of this program are utilized in support of other programs including the National Mineral Resource Assessment and Strategic and Critical Minerals programs. This support work incorporates proven techniques and methodology and provides a testing ground for the evaluation of new technology for future use.

Recent significant contributions of the program include:

- Presentation of the V. E. McKelvey Forum, a major public meeting at which highlights of current USGS research on mineral resources were communicated to the earth science community, including representatives of the mining and petroleum industries, academic institutions, and other Federal and State agencies.
- Discovery of a method for detecting hidden ore deposits by recognizing the presence and magnitude of anomalies formed by slight heating of the rocks above the deposits.
- Recognition of the probable importance and diverse functions that organic matter, including humic acids and living organisms, apparently have in the formation of ore deposits.
- Development of new airborne spectral radiometric technology to quickly and efficiently recognize altered and mineralized areas associated with hidden deposits.
- Development of mineral deposit models for the origin of major Mississippi Valley-type lead-zinc deposits.
- Development of geobotanical remote sensing techniques to detect the presence of stressed vegetation above undiscovered mineral deposits.
- Improvement of a computer-based, deposit-model expert system for more efficient mineral resource assessments.
- Development of new techniques to understand the process of ore transport and deposition by analyzing the composition of ore minerals.
- Study of mineral samples and fluids from submarine polymetallic deposits forming on the seafloor off the coast of California and Oregon for analyses to understand the mechanism of formation of these deposits and similar ones on land.

The FY 1987 program will include:

- The acquisition and interpretation of fundamental geological, geochemical, and geophysical data needed to understand the processes by which ore deposits form.
- Continuation of geologic investigations to develop basic knowledge of ore genesis and develop genetic models to improve the efficiency and effectiveness of resource identification and assessment.

- Field and laboratory studies of the processes and products of primary and secondary geochemical dispersion of trace and minor elements within and surrounding mineral deposits.

- Investigation of the role of organic matter, especially microbiological material, in the formation and detection of concealed ore deposits.

- Field and laboratory studies of the regional and local geophysical signatures of ore deposits, including development of thermal infrared technology for remote sensing of deposits.

	Planned Workload			
	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Mineral deposit models	34	34	34	34
Geochemical exploration techniques	12	12	12	12
Geophysical exploration techniques	13	13	13	13
District and deposit studies	30	30	30	30
Minerals research studies	20	20	20	20

Estimated unit costs in FY 1987:

Projects---------------------------109 @ $115,000

Justification of Program and Performance

Activity: Geologic and Mineral Resource Surveys and Mapping
Subactivity: Energy Geologic Surveys

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Evolution of Sedimentary Basins	$	5029		5052	5052	0
	FTE-T	118		118	118	0
Coal Investigations	$	8191		8229	6029	-2200
	FTE-T	121		121	117	-4
Onshore Oil and Gas Investigations	$	4617		4638	4638	0
	FTE-T	97		97	97	0
Oil Shale Investigations	$	557		559	559	0
	FTE-T	10		10	10	0
Uranium/Thorium Investigations	$	3139		3154	3154	0
	FTE-T	25		25	25	0
Geothermal Investigations	$	5896		5922	5141	-781
	FTE-T	105		105	102	-3
World Energy Resources	$	497		499	499	0
	FTE-T	1		1	1	0
Total Requirements	$	27926	26725	28053	25072	-2981
	FTE-T	477	477	477	470	-7

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
27,926	-1,201	26,725

The impact of the $1,201,000 reduction to the Energy Geologic Surveys subactivity is as follows: study of the evolution of the Appalachian Basin will be postponed, except for coal-bearing sequences; studies of the character and resource extent of coal in the San Juan Basin will be postponed; NCRDS/State contracts in selected States will be curtailed or suspended; and synthesis of geologic, geophysical, geochemical, and hydrological information for a regional assessment of Cascades geothermal resources will be postponed.

Authorization

43 U.S.C. 31(a)	The Organic Act of 1879 authorizes the Geological Survey to conduct "classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain." The Geological Survey provides basic geologic and geophysical data and information to all Federal and administering agencies for purposes of public land management, including the Bureau of Land Management, Fish and Wildlife Service, Forest Service, and others.
30 U.S.C. 201 P.L. 94-377.	The Federal Coal Leasing Amendments Act of 1976 provides that no lease sale may be held on Federal lands unless the lands containing the coal deposits have been included in a comprehensive land use plan. The Act provides that the Secretary is authorized and directed to conduct a comprehensive exploratory program designed to obtain sufficient data and information to evaluate the extent, location, and potential for developing the known recoverable coal resources within the coal lands. The Geological Survey provides data and information from its coal research and field investigations which are useful to the Bureau of Land Management to meet the requirements of the coal leasing program.
30 U.S.C. 1121 P.L. 93-410	The Geothermal Energy Research, Development and Demonstration Act of 1974 provides that the Department of the Interior is responsible for the evaluation and the assessment of the geothermal resource base, including the development of exploration technologies.
42 U.S.C 4331 P.L.91-190.	The National Environmental Policy Act of 1969 requires that proponents of major Federal actions sufficently affecting the quality of human environment consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved.
16 U.S.C. 3141-3150, 3161 P.L. 94-579	The Alaska National Interest Lands Conservation Act of 1980. Section 1001 of the Act requires that the Geological Survey will assess the oil and gas potential of Federal lands north of 68° North latitude, east of the National Petroleum Reserve and west of the Arctic National Wildlife Refuge, and participate in a review of the wilderness characteristics of the area. Section 1008 of the Act authorizes the Secretary to conduct studies, or collect and analyze information obtained by permittees, of the oil and gas potential of non-North Slope Federal lands.

42 U.S.C. 2210b,2231	Public Law 97-415 requires the Secretary of Energy to monitor and report to the President and Congress on the viability of the domestic uranium industry. Under a Memorandum of Understanding between the Department of Energy and the Department of the Interior, the Geological Survey provides information on domestic uranium resources to the Energy Information Agency, beginning in FY 1985.

Energy Geologic Surveys are conducted to improve the understanding of the nature, distribution, and size of the national endowment of energy-related resources as a prerequisite to the formulation of an effective national energy policy and optimum development of energy resources. Studies conducted under the Evolution of Sedimentary Basins element, including tectonic framework and depositional, thermal, and diagenetic processes, are basic to successful prediction and evaluation of mineral and hydrocarbon resources. Within modern and ancient basins, surveys of coal, oil and gas, oil shale, and uranium/thorium all involve geologic, geophysical, and geochemical studies, construction and maintenance of requisite supporting data systems, and development of methodologies for arriving at reliable resource appraisals. The Coal Investigations element provides critical information on the quality and quantity of coal available for development, along with information needed to reduce adverse environmental effects of coal exploitation. A growing, computerized coal-resource data system is drawing worldwide attention as a model information source for a wide range of government, industry, and research needs. The Oil and Gas Investigations element provides estimates that are critical because of the dominant role of these resources in the Nation's energy plans. Research on basic geology and geochemistry of both new and unconventional hydrocarbon sources provides a basic knowledge of the Nation's resources, which adds to the cost-effectiveness and success of the search for domestic energy sources in an effort to achieve independence from foreign supply. The Oil Shale Investigations element conducts research to determine the regional relationships and differences in quality, by-product, and other factors that are important to the understanding of the resource and the limitations of existing extraction technology, as well as identifying any adverse environmental effects that would result from development of the resource. The Uranium/Thorium Investigations element conducts intensive multidisciplinary research on the origin and habitat of ore deposits that yield the uranium-occurrence and resource-assessment models needed for exploration. This program element is also responsible for the maintenance of the National Uranium Resource Estimates (NURE) data base. The principal goals of the Geothermal Investigations element are to describe the nature and estimate the location and magnitude of geothermal resources of the United States, and to develop an understanding of the geologic and hydrologic processes and conditions of geothermal systems. The objectives of the World Energy Resource Assessment element are to provide geologic information and assessments on world energy resources, with particular attention given to oil and gas resources.

Evolution of Sedimentary Basins

Objectives: To provide a multidisciplinary approach to research studies of the evolution and constituents of sedimentary basins, ancient and modern, including systematic interpretation of the sedimentary geology--history, settings, habitats, and processes--involved in energy basins of different types; to determine the interaction among mineral deposits and host rocks, based on biological, geochemical, and tectonic principles; to integrate surface and subsurface geological, geophysical and geochemical information; and to provide data and interpretations of the resources potentially present. A systematic, basin-by-basin analysis will provide the basic sentific understanding required for the assessment of multiple energy and mineral resources within a single basin.

Base Program: The Evolution of Sedimentary Basins element establishes a basic research program in soft-rock geology which provides a focus for integrated multidisciplinary studies of sedimentary basins. Sedimentary basins are fundamental, well-defined building blocks of the Earth's crust, and as such they are important elements of the Nation's geologic makeup. But, in addition, it is the settings, geologic histories, and geologic processes within these sedimentary basins that control the occurrence of oil and gas, uranium, oil shale, coal, phosphate, and many other economic mineral resources.

Studies of onshore, ancient basins are designed to lead to a better understanding of geologically comparable basins offshore, where, in comparison, data typically are too sparse or limited in kind, e.g. there are no outcrops to sample on the ocean floor to permit the "hands-on" detailed analysis onshore basins receive. Conversely, offshore studies of the processes of present-day sedimentation have made valuable contributions to our understanding of the sedimentary geology of onshore basins. In this program element, studies are conducted, therefore, in a variety of continental and marine basin settings, both ancient and modern. An emphasis is placed on resource accumulation and reservoir properties that result from a variety of sedimentary and diagenetic processes (geochemical and rock fabric changes) operating throughout the evolution of any particular basin. Successful understanding and prediction of the occurrence of energy and mineral resources requires an understanding of basin history, including the interaction of tectonics and sedimentation; sediment dewatering and paleohydrologic history; and a wide range of rock-water interaction effects resulting in diagenetic changes and reflecting the migration of fluids of varying composition throughout the historical existence of the basin.

The specialized studies under this program, coordinated to allow a thorough investigation of the principal controls on energy minerals generation and existence, are providing a sounder basis for assessing the energy resources of the onshore United States. This is especially significant for frontier areas, such as the Alaskan North Slope Basin and for the deeper parts of conterminous U.S. basins such as the deep Anadarko Basin of Oklahoma, Texas, and Kansas, where exploration has not reached the levels experienced elsewhere. More inportantly, these investigations permit the Geological Survey to provide the needed background information for more accurate and timely energy resource assessments.

The program, combining basic and applied research, is composed of:

- Development of geologic surface and subsurface maps that establish and document the basin's fundamental rock units, and illustrate the stratigraphic, temporal, and tectonic relations.

- Regional stratigraphy and sedimentology in the Anadarko, Appalachian, Powder River, and Alaskan North Slope Basins, with particular emphasis on defining stratigraphic units. These units are to be related to basin tectonic episodes, erosional events, and marine-continental transgressions. Products will include facies maps, isopach maps of time-equivalent units, cross-sections, structure-contour maps, and paleogeographic reconstructions.

- Determining sources of sediments and directions of transport migration of oil and gas and documenting tectonic and volcanic events that may have influenced the emplacement of energy minerals or their source and transport.

- Petrography and petrology of sedimentary rocks and corollary chemical analysis of selected mineral components in order to determine physico-chemical changes that have altered the rock during diagenesis or later stages, particularly where such changes are critical to the creation of habitats favorable for the formation of energy and mineral deposits. These investigations are designed also to provide information about the processes (e.g. geochemical changes associated with the carbon cycle) that formed and changed energy and mineral deposits through time. These measurements, as indicators, will also provide insight into the ground-water flow throughout a basin and the attendant rock-water interactions inducing the initiation of mineral deposits or their accumulation.

- Thermal and hydrologic regime reconstructions to improve the understanding of the properties of reservoir rocks and techniques of enhanced recovery. This involves reconstruction of basin geometry, past thermal conditions and its hydrologic regime through time, with specific attention given to patterns of subsurface pressures, fluid and gas flow, aqueous geochemistry, compaction and dewatering hydrology, post-compaction hydrology, and the influence of ground-water flow on the migration and entrapment of resource materials.

- Geophysical studies, using seismic reflection profiles to establish three-dimensional information on basin stratigraphy and structure, borehole measurements of rock properties (especially in association with diagenesis studies), and field surveys to identify basement character that may have influenced basin tectonism and sedimentation.

In FY 1985, initial studies began on four basins to establish their geologic framework: the Anadarko, Appalachian, Powder River, and Alaskan North Slope Basin, each having a very considerable geographic extent. In FY 1986, similar pilot studies have been started in the Uinta-Piceance and San Juan Basins. In FY 1987, subsurface crustal, thermal, and pressure regime evaluations will be initiated, together with research on the chemistry of subsurface fluids.

Recent accomplishments include:

- For the Anadarko Basin, a data base consisting of USGS and Oklahoma and Kansas Geological Survey field data and wireline data has been organized. A thermal maturation model has been constructed.

- For the Central Appalachian Basin, the major stratigraphic framework (Cambrian to Pennsylvanian age) has been established.

- A data base, comprised of surface and subsurface geological data, including core data and geophysical measurements, has been established for the Powder River Basin.

- The paleohydrologic regime of the San Juan Basin is being studied to ascertain the role of ground water in the transport and deposition of minerals.

	Planned Outputs			
Evolution of Sedimentary Basins	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Components of Basin Analyses				
Stratigraphic studies/syntheses	[illegible]	[illegible]	[illegible]	[illegible]
Paleoenvironmental studies	[illegible]	[illegible]	[illegible]	[illegible]
Geochemistry and mineralogy studies	[illegible]	[illegible]	[illegible]	[illegible]
Paleohydrology studies	[illegible]	[illegible]	[illegible]	[illegible]

Estimated average unit costs for program outputs in FY 1987:

Stratigraphic studies/syntheses	[illegible]
Paleoenvironmental studies	[illegible]
Geochemistry and mineralogy studies	[illegible]
Paleohydrology studies	[illegible]

Coal Investigations

Objectives: To conduct geologic, stratigraphic, geophysical, and geochemical investigations of domestic coal deposits in order to produce reliable, credible, and scientifically based assessments of the quality and quantity of U.S. coal resources; to develop predictive models concerning the origin, distribution, and chemical composition of coals and to develop and maintain a computerized National Coal Resources Data System capable of storing data gathered for producing reliable and timely coal resource assessments.

Base Program: The Coal Investigations element consists of two subelements: Coal Resource Investigations and National Coal Resources Data System. A Federal coal investigation program is essential in ensuring the existence of a publicly available, reliable, and comprehensive data base on which to base short- and long-term policy and management decisions concerning the Nation's endowment of coal resources. Such decisions concern economic development, national defense, tradeoffs among competing energy resources, transportation needs, environmental issues, matters of [illegible] safety, coal export issues, and Federal land policy. The demand for coal is increasing, after a brief pause, as a result of increased energy demand and accelerated conversions from nuclear and petroleum-burning facilities to coal. This increased utilization will produce increasing needs in the public sector for the kinds of information resulting from the programs described below.

c. Coal Resource Investigations: Building on the research findings of the evolution of sedimentary basins program, this subelement consists of field and laboratory geologic, geophysical, and geochemical studies of coal deposits and coal-quality and coal-resource assessments. The work is focused primarily on basic coal geologic and geochemical research for the purpose of identifying the coal-quality aspects of potentially economic coal deposits in the United States. A principal objective is to delineate, correlate, and model the physical and chemical attributes of coal beds of potential economic value through local and regional stratigraphic correlation networks and to determine the coal-quality factors that must be investigated in assessing the overall resource potential of the deposits.

Coal-quality studies are conducted to permit the extrapolation of point-source data on coal quality throughout a coal basin to identify deposits of potential economic significance, thus leading to a reliable assessment of a basin's coal resources and an understanding of how and where variations in coal quality may affect the societal and environmental acceptability, as well as the economics, of coal utilization. While there are extensive known coal deposits throughout the United States, new data on coal quality, in combination with information on the location, thickness, overburden, interburden, structural attitudes, and accessibility, are critical to determining the overall economic potential of the deposits. Coal-quality factors such as heating value, moisture and ash content, and sulfur and trace-element content are fundamental to determining coal-quality related resource assessments. Knowledge of these factors will aid the Nation in increasing coal use in an environmentally acceptable manner, including energy technology development and solving problems related to acid rain.

The Coal Resource Investigations subelement provides basic coal-geologic, coal-quality, and coal-resource information on Federal, State, and private lands. The essence of this subelement, partly conducted in cooperation with State geological surveys, is the acquisition of fundamental geologic, geophysical, and geochemical data, both surface and subsurface, aimed at understanding the distribution, quality, quantity, and nature of coal deposits in the United States. In FY 1985, a prototype State coal-resource report was prepared for New Mexico. In FY 1986 and FY 1987, similar reports will be prepared for Georgia and Maryland. A revision and update of the coal resources of the entire United States is being prepared in FY 1986; publication is planned in FY 1987.

Regional geologic data and coal-quality information gathered in support of coal-resource appraisals and coal-development planning are used to prepare 1:100,000-scale maps, a scale consistent with geologic research and coal industry and State needs. Publication of the backlog of these 1:100,000-scale maps that are nearly complete will be continued.

d. National Coal Resources Data System (NCRDS): The NCRDS is a sophisticated data management system developed to facilitate coal-related policy analysis and decision making at all levels of Government and the private sector. The NCRDS has an important function in the area of coal quality as well as in its overall coal-resources function. Coal-quality data are entered into NCRDS for 1) nationwide distribution; 2) geostatistical analysis of coal-quality research results; 3) assessment of blocks of coal having specific coal-quality attributes; and 4) preparing integrated visual displays of coal-quality and coal-resource related data. NCRDS is designed to generate assessments of coal quantity and quality by region, State, county, or smaller subdivision as required.

NCRDS incorporates aggregated data on coal resources derived from existing noncomputerized resource files and reports, and disaggregated or point-source geologic and coal-quality data obtained from mines, core holes, and outcrops. NCRDS includes measurements such as coal-bed, overburden, and interburden thicknesses, moisture, sulfur, ash, and trace-element content, and heating value. The point-source data file can be used to produce computer-drawn resource maps of various types, including coal-quality maps, for use in 1) national energy-policy planning; 2) State responsibilities for mining development and regulations; 3) development of coal extraction technology by industry and government entities; and 4) lease evaluation by government agencies, including multiple-land-use planning, as well as quantitative resource assessments. Coal-quality data contribute to coal-cleaning, combustion, and synfuel technology development, environmental impact studies, and regulatory policy planning.

Entry of data into NCRDS is being accomplished through cost-sharing cooperative agreements with State geological surveys and a university.

Recent accomplishments include:

- Publication of a methodology for the rapid description of whole coal samples using an automated image analysis system.

- A dedicated mini-computer for the National Coal Resources Data System (NCRDS) has been acquired to enable priority processing of coal-quality/coal-resource data at low cost.

- Six coal-geologic/coal-resource maps have been published, at 1:100,000 scale, based on work that was carried out under the Coal Folio Program. The coverage of these five maps is two in Colorado, and one each New Mexico, Utah, Wyoming, Montana. Four others are in preparation for Utah, Wyoming, and Montana.

- A geostatistical program has been developed and installed on NCRDS for providing an explicit evaluation of the reliability of coal-quality/coal resource assessments made contingent on the amount of data available to make the assessments.

- Coal resources assessment of New Mexico in cooperation with the New Mexico Bureau of Mines and Mineral Resources has been completed. This assessment was based in part on the geostatistical program described above.

- Convened a symposium on coal quality for the purpose of an exchange of views on coal-quality and related research among members of industry, academia, State, and other Federal agencies and the development of an updated agenda for coal-quality research in the USGS. The symposium was cosponsored by the DOE, EPA, Electric Power Research Institute, and Association of American State Geologists.

	Planned Workload			
	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Coal Investigations				
Coal Resource Investigations				
Coal quality investigations	10	10	10	8
Coal resource assessments	14	14	14	5
University grants	5	3	1	0
National Coal Resources Data System				
State Coop Contracts	19	20	21	4
1:100,000 Maps Entered	15	15	15	15
Point-source Data Entered	30,000	30,000	30,000	15,000

Estimated unit costs at the FY 1987 estimate level:

Coal-resources update assessments	5 @ average cost of approximately $312,000
Coal investigations projects	19 @ average cost of approximately $220,000
State coop contracts	4 @ average cost of approximately $ 70,000
NCRDS point-source data entry contract	1 @ average cost of approximately $ 60,000

Decrease for FY 1987

(Dollars in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
$	8,229	6,029	-2,200
(FTE-T)	(121)	(117)	(-4)

The decrease requires that the Geological Survey reduce funding of its share of funding cooperative arrangements with States (i.e. grants and contracts) by 80 percent. Personnel will be reduced and geographic coverage of coal resource studies will be curtailed, including field mapping and the acquisition and analysis of samples for coal quality and coal resource estimation.

Object Class Distribution

	FTE-T	Amount
Personnel Compensation	-4	$118,000
Personnel Benefits		15,000
Travel and Transportation of Persons		81,000
Transportation of Things		75,000
Communications, Utilities, and Miscellaneous Charges		227,000
Printing and Reproduction		61,000
Other Services		912,000
Supplies and Materials		353,000
Equipment		358,000
Total		$2,200,000

Oil and Gas Investigations

Objectives: To conduct fundamental and applied geologic, geochemical, and geophysical research, both topical and regional in scope, into the habitat, generation, migration, and entrapment of oil and gas. The acquired knowledge will be used as a basis for reliable and credible oil and gas resource assessments for public and private lands.

Base Program: Building on the research findings of the Evolution of Sedimentary Basins element, the Oil and Gas Investigations element provides basic information on the occurence of oil and gas and on the processes by which these hydrocarbons form and accumulate in traps. This information is released in a timely fashion and serves as an applied research base for the independent oil companies, which drill over 90% of the wildcat exploration wells in the United States, who do not have research capacity of their own. Studies are aimed at understanding hydrocarbon generation and maturation from suitable source beds and the geologic settings in which these occur, the geochemical controls of oil and gas generation, maturation, and migration, the nature of stratigraphic and structural traps--their origin, character, localization in time and space, and the improvement of detection methods for petroleum. Selection of research topics in these subject areas are based both on general knowledge of the kinds of advances and concerns in petroleum geology that need evaluation and on information conveyed by industry.

Oil and gas resource investigations involve multidisciplinary research in geology, geochemistry, and geophysics in order to establish a knowledge base on the geologic habitats and processes that result in oil and gas formation, migration, maturation, and entrapment. Other studies are aimed in new directions that may help in evaluating frontier areas or finding petroleum overlooked in known areas. For example, detection studies include advanced research on such features as magnetic haloes, plant stress, soil changes, and helium anomalies related to leakage of minute amounts of gas upward from deep petroleum reservoirs.

A major effort to develop basic information on unconventional petroleum resources, such as hydrates, tight gas sands, shallow biogenic gas, and deep-source gas has been pursued the past few years in cooperation with the

Department of Energy. These studies are expected to continue to define major future exploration areas and to define the physical nature of the reservoir rocks as an aid in planning future economic production of this major untapped resource.

The overall information base acquired through the activities described above is essential for the Geological Survey to provide national or regional assessments of oil and gas resources in support of national energy policy planning. The results of these studies are made available to Federal and State government officials, the petroleum industry, and the concerned public. The public availability of the basic data and analyses lends credibility to the resource assessments and promotes application of the findings to land-use planning decisions. The Geological Survey's assessments of undiscovered domestic oil and gas resources are used by the Department of Energy as a source of essential data for reports to Congress on the status of the United States' energy supply. In FY 1985, a major program effort was begun to produce estimates of undiscovered oil and gas resource potential on Federal lands. A detailed play analysis approach was designed, using the full range of program research expertise, and resource estimation using this approach has begun for Federal Lands. New estimates of offshore oil and gas resources will be prepared in cooperation with the Minerals Management Service.

In FY 1987, research will be continued on oil and gas appraisal of Federal lands and on improved assessment methodology. Topical petroleum research activities in geochemistry, biostratigraphy, clastic and carbonate sedimentary formations, geophysics, and remote and direct detection of hydrocarbons will also be continued in FY 1987. Specifically, investigations will be conducted on paleoclimates, thermal maturation of petroleum, seismic reflection technology, and on unconventional sources of hydrocarbons. The results of these research activities are fundamental to making the Department's oil and gas assessments reliable and timely.

Recent accomplishments include:

- Studies of gas hydrates improved the understanding of how thermodynamics control in-situ gas hydrate formation, the geologic conditions in which hydrates form, and the definition and evaluation of gas hydrates reservoirs. Models developed for gas hydrates forming and stored in various geological environments provide one of the bases for estimating the extent and likelihood of occurrence of a vast unconventional gas resource.

- A speculative model developed for the generation of deep gas at convergent plate margins includes information on the volume of sediment, the organic matter content, and the thermal gradient in the subduction zone, i.e., where one segment of continental crust is thrusted under another. Using geologic, geochemical, and geophysical data, the volume of gas generated in the subduction process during a given time interval can be estimated.

- In the first phase of the Federal Lands Assessment Program, the definition of some 300 plays has been completed, and geologic characterization that will result in a quantitative estimate of undiscovered hydrocarbon resources on Federal lands has begun.

This effort is the precursor to a new National oil and gas resource assessment, the offshore portion, will be conducted in cooperation with MMS as mandated by Congress.

- Development of Expert Systems (using artificial intelligence) for the interpretation of various geologic depositional environments by computer has been started. The user-friendly system is designed to incorporate the knowledge and understanding of an expert to interact with the data in the existing data base, allowing the user to continuously interpret the various geologic depositional environments.

- Assisted, together with BLM and BIA, in establishing and maintaining with industry the Petroleum Information data base, which contains 1,800,000 well locations and corollary drill hole data.

- With BLM and FWS, detailed geologic analysis of the coastal plain of the Alaska National Wildlife Refuge and adjacent areas was completed, including an oil and gas resource assessment. The results form part of the Secretary of the Interior's report to Congress as mandated by law.

- Improvements in vertical seismic profiling techniques, which have great potential for facilitating identification of potential gas-bearing resources in the subsurface, continued. These techniques were successfully tested in wells at the DOE multiwell test site, Garfield County, Colorado.

- Began compilation of a thermal maturation Map of the United States, which will provide information on areas conducive to the generation of oil and gas, geothermal resources, and indirectly, to the rank of coal deposits.

- Maps and charts summarizing salient aspects of oil and gas resources in the United States are being produced in an Atlas of Oil and Gas Information. The products will be beneficial to government agencies, industry, and academia by providing up-to-date locations of petroleum reserviors, geologic cross-sections, sediment and thickness maps, and charts of drilling densities.

- Supported BLM programs for evaluation of Known Geological Structures, as well as drainage studies, by use of the Well History Control System files.

	Planned Workload			
Oil and Gas Investigations	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Offshore oil and gas resource appraisal study	0	1	1	1
Remote sensing investigations	1	1	1	1
Hydrocarbon potential studies	13	10	10	10
Topical Research	30	16	16	16

Estimated unit costs at the FY 1987 level:

Offshore oil and gas resource appraisal	1@ average cost of approximately $	500,000
Remote sensing investigations	1@ average cost of approximately $	220,000
Hydrocarbon potential studies	10@ average cost of approximately $	180,000
Topical research	16@ average cost of approximately $	132,000

Oil Shale Investigations

Objectives: To determine the geologic habitat of domestic oil-shale deposits on a regional and national basis; to apply this understanding to the development of regional and national assessments of shale-oil resources; to determine the geologic, mineralogic, and geochemical character of oil shale; and to provide information on environmental and other factors affecting its exploitation.

Base Program: Research conducted under the Oil Shale Investigations element is focused primarily on the rich deposits of oil shale in Colorado, Utah, and Wyoming, and on the geological factors governing extraction and recovery of shale oil, which involves complex technological and environmental problems. Hence, a large resource base, in combination with a favorable geologic setting, is needed to permit the selection and development of specific deposits that will ensure efficient and profitable production and will meet established environmental standards and technological requirements. Although the locations of oil-shale deposits are known, the economics of exploitation have prevented use of this resource. The economics are primarily driven by the extraction technology, and that in turn strongly depends on such factors as grade variation controlled by the environment of deposition and from water-conducting fracture systems. Research to address both factors is the major focus of this program. In FY 1985 studies concentrated on the chemical, gas, and mineralogic composition and quality of oil shale.

In FY 1986-87 research is directed principally at the chemical and mineralogic variations and water-conducting fracture systems in the Piceance Basin deposits in Colorado. A lower level of activity is continuing in Utah and Wyoming. These current research activities include quadrangle mapping and stratigraphic studies of the Green River Formation; compilation of stratigraphic, lithologic, geochemical, geophysical, and resource evaluation data for entry in a computerized system that will provide an inventory of oil-shale deposits; research on sodium-aluminum minerals that are potentially useful by-products of oil-shale processing and on minerals that may hinder retorting processes; and a review of various resource evaluation methods that have been used for appraising shale-oil yields of domestic and foreign deposits.

Industry has incorporated the stratigraphic correlations and other geologic concepts developed under this element into its detailed site- specific oil-shale development plans. Resource maps of selected shale units and detailed geologic maps of parts of the Piceance and Uinta Basins in Utah and Colorado have been published, as well as baseline study reports on the chemistry and mineralogy of oil shale and surficial materials.

- All available core data from the Piceance Basin has been incorporated in the oil-shale data base. A detailed geologic map of the Philadelphia Creek quadrangle in the northwestern part of the basin was completed. The map will be used by BLM in an evaluation of this area as a potential oil-shale waste-depository site.

- Investigation of methane in oil shale was initiated.

- Experimental work on the separation of sulfur present in the Green River oil shale of Colorado has been completed.

	Planned Workload			
Oil Shale Investigations	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Oil-shale research projects	4	4	4	4

Estimated unit costs at the FY 1987 level:

Oil-shale research projects 4 @ average cost of approximately $140,000

Uranium/Thorium Investigations

Objectives: To conduct fundamental research and investigations in order to improve the understanding of the geologic setting and distribution of domestic uranium and thorium resources at the regional and national level; to develop techniques for increasing the discovery rate and exploitation of low- cost, world-competitive nuclear raw materials; to develop the regional geologic guides for the assessment of undiscovered uranium resources; and to administer the National Uranium Resource Evaluation (NURE) data base transferred from the Department of Energy (DOE), including incorporation of this information into uranium research and resource assessment, and providing public access to the data base.

Base Program: The Geological Survey's Uranium/Thorium program consists of two major elements: 1) basic research on earth processes that form uranium, thorium, and associated base, precious metal, and light-rare-earth resources, and 2) providing required geologically based estimates of the Nation's uranium and thorium endowment to the technical public and Federal agencies. Both elements have direct and important application to the assessment of and exploration for other strategic minerals for which there are no comparable systematic data.

In relation to the latter, the program is responsible for administering the former Department of Energy NURE program. Under the terms of a Memorandum of Understanding with the DOE, the Geological Survey is required to conduct, on behalf of the Energy Information Administration (EIA), uranium resource assessment work that meets the objectives of the industry viability study, i.e., provide conditional uranium endowment estimations, based on a mutual selection of prospective resource areas and classifications according to DOE standards. The USGS and EIA share the responsibility for the preparation and publication of the congressionally mandated biannual uranium/thorium report pertinent to international activities. With these transferred responsibilities, the Survey assumed operation of the NURE program including all non-proprietary geoscience data, which the Survey is required to maintain for public access and distribution.

The research program focuses its efforts on topics or geographic areas where results of investigations can be expected to affect estimates of undiscovered uranium and thorium and to identify and characterize environmental or health hazards caused by uranium. Program activities include the development of genetic models that can improve techniques for the discovery of new deposits, the assessment of uranium resources in explored districts, and the assessment of poorly understood and/or under-explored terranes. Most of the research is based on data generated by mine and district studies undertaken by industry, the Geological Survey, and the Department of Energy and its contractors. Five major topical research categories are included: 1) uranium and thorium framework geology (stratigraphy and geochronology) investigations of ore-forming processes, geochemical controls, source rock, mineralogy and chemistry, and geochemical exploration techniques leading to estimations of potential uranium and thorium endowment; 2) uranium and thorium in igneous and metamorphic and veined rocks (development of models describing unusually rich deposits found at geologic unconformities and other "world class" deposits such as uranium-molybdenum and uranium-gold deposits in volcanic centers, which are expected to dominate the world uranium market for at least the next decade); 3) uranium and associated metals in sedimentary environments (studies designed to understand the geologic characteristics and controls on ore deposition); 4) developing geophysical, biogeochemical, and mathematical means to detect characteristics or patterns leading to uranium and thorium deposits; 5) resource assessment studies and improvements in evaluation methods; and 6) investigations to identify and model very young surficial uranium accumulations that represent both potentially economically minable ore deposits and sources of potentially hazardous, toxic uranium metal that cannot be detected by the usual radioactivity surveys.

In FY 1985, investigations were initiated to identify the causes and origin of radon accumulations in populated areas. These research efforts will all take advantage of data gathered through the NURE program. The NURE aeromagnetic and aeroradiometric data are being used to locate potentially high radon gas emissive terrain, as radon, a radiogenic daughter product of naturally decaying uranium, has been found at potentially dangerous radioactive levels in dwellings and the water supply in the Reading Prong (Pennsylvania, New Jersey, New York) area. Other potentially hazardous areas, numbering about 10 nationwide, will be surveyed and sampled in FY 1986 on a reimbursable basis for EPA.

Five major topical and geographic areas will be investigated, in FY 1987: 1) surficial uranium deposits throughout the United States, 2) uranium in mineralized zones of the Colorado Plateau, 3) uranium in metamorphic rocks in the Piedmont Province of the Eastern U.S., and 4) uranium in sedimentary rocks of the Great Plains and 5) uranium decomposition and distribution and radon gas levels in the Reading Prong area of the Eastern United States. Research in the first four areas involves the geology and mineral resources in 28 (1-by 2-degree) quadrangles that are most likely to contain at least 500 tons of uranium, and 36 other quadrangles with quantities below 500 tons.

Program efforts will continue at a reduced scale, however, in regard to these geographic areas, and especially as these efforts pertain to obtaining new data or generating syntheses for the NURE phase of the program. Instead, emphasis will be placed on basic research on earth processes that establish uranium/thorium and associated base metals, precious metals, and rare-earth minerals, and on geologically based resource estimates of the Nation's uranium/thorium endowment. NURE geochemical and geophysical data will be factored into the models for key areas and deposit types as they become available.

Recent accomplishments include:

- Developed geologic recognition criteria and grade-tonnage model for the young organic uranium deposits, a variety of surficial deposits, from detailed stratigraphic, geochemical, and radiogenic isotopic studies of the type deposit and nearby areas.
- Estimates were made of potential uranium resources in surficial uranium deposits in the Sandpoint and Spokane $1^{\circ} \times 2^{\circ}$ quadrangles, Washington (NURE-EIA responsibility).
- Surface geology, stable and radiogenic isotope, geophysical, geochemical, and coring studies were applied to mineralized collapse-breccia pipes on the Colorado Plateau, including those on the Hualapai Indian Reservation.
- A preliminary analysis, based on multiple geochemical and geophysical (including NURE) data sets, was made of the Colorado Plateau to begin establishing the rock framework and ore bodies.
- Geologic framework units that yield radon in Pennsylvania, New York, and New Jersey have been described, and other potentially high-radon producing areas in the U.S. are presently being identified in cooperation with the Environmental Protection Agency.
- The relation of clay mineral species, stable isotope chemistry, basinal brines, and uranium ore genesis in the Henry Mountains area of southeastern Utah was developed and reported.
- A compendium of reports on the analysis of the Morrison depositional basin in northern New Mexico, and on the origin of ores and amount of uranium in the San Juan basin, was completed.
- An analytical technique was developed for specific oxidation states of vanadium and iron; this technique was applied to analysis of vanadium-uranium ores from the Colorado Plateau.
- Geologic studies were conducted in the Lake City, Colorado, area.

	Planned Workload			
	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Uranium/Thorium Investigations				
Geochemistry and Mineralogy Investigations	3	2	2	2
Studies of Uranium in Sedimentary Environments	7	6	6	6
Studies of Uranium in Igneous and Metamorphic Rocks	2	2	2	2
Support for EIA				
Annual Reports to DOE	1	1	1	1
Uranium Provinces under investigation	4	0	0	0

Estimated unit costs at the FY 1987 level:

Geochemisty and mineralogy	2 @ average cost approximately $210,000
Uranium in sedimentary environments	6 @ average cost approximately $318,000
Uranium in igneous and metamorphic rocks	2 @ average cost approximately $340,000
Support for EIA	1 @ average cost approximately $184,000

Geothermal Investigations

Objectives: The goal of Geothermal Investigations is to understand the nature, distribution, and magnitude of geothermal resources of the United States, as a basis for determining the proper role of geothermal energy as one of the alternative energy sources in national energy policy. This goal is being addressed by a program of studies with the following objectives: (1) definition of the geologic and hydrologic regimes of the various classes of geothermal resources; (2) identification of the crustal magmatic, geochemical, and hydrothermal processes that produce geothermal systems; and, (3) estimation of the location and energy potential of the Nation's geothermal resources.

Base Program: The main components of this program are: (a) geological, geochemical, geophysical, and hydrological characterization of all types of geothermal systems; (b) national and regional geothermal resource assessments, including estimates of the distribution and energy content of undiscovered hydrothermal resources, evaluation of recoverability of thermal energy from hydrothermal resources, and development of methodologies and techniques for assessing thermal energy stored in magma and hot dry rock; and, (c) evaluation of environmental effects, including seismicity, ground subsidence, and hydrologic changes that may be induced by the withdrawal of fluids from, or injection of fluids into, a geothermal system.

The Geothermal Investigations Program has been oriented primarily toward characterization and assessment of hydrothermal convection systems and their geothermal energy resources within the upper 3 km of the crust. Results from this program have been used widely by industry in geothermal exploration activities. "Geothermometers," sets of temperature-sensitive chemical measurements which are now routinely applied to estimate subsurface reservoir temperatures in geothermal resource assessment, were developed by the Geological Survey in the 1970's. An expansion of industry activity during the past several years into areas outside northern California--including Hawaii, Utah, Oregon, Nevada, and central and southern California, has focused attention on Geothermal Investigations Program studies in these areas. In particular, industry is expressing increased interest in the Cascades, due in large part to discoveries at a high-temperature Geological Survey research borehole at Newberry volcano, Oregon.

Because of the much larger amount of thermal energy potentially available in the deeper crust, primary emphasis is being given now to areas where molten rock (magma), hot dry rock, and hydrothermal systems occur together. The Geological Survey estimated in a natiowide geothermal resource assessment in 1978 that the amount of thermal energy stored in magma, hot dry rock, and hydrothermal convection systems to a depth of 10 km might be as much 100 times the energy assessed in hydrothermal convection systems alone to a depth of 3 km. Although the technology of extraction of this deep geothermal energy is not yet economic, the potential impact of such a large amount of energy is immense. Accordingly, the Geological Survey is aggressively pursuing the fundamental research necessary to understand the crust's deeper geothermal regime, to determine the true magnitude of igneous-related geothermal energy, and to evaluate its division among magma, hot dry rock, and hydrothermal convection systems. The studies are long-term, basic research investigations on topics that will provide the resource information needed by industry to help reduce risk in exploring for and developing the economic use of these alternative energy sources. In addition, the results will clearly promote a better understanding of the origin of hydrothermal ore deposits. The Geological Survey studies are coordinated with investigations of the Department of Energy (DOE) and are being supplemented by data from deep drilling locations identified by the Continental Scientific Drilling Committee of the National Academy of Sciences.

Recent accomplishments of the Geothermal Investigations Program include:

- Delineation of the complex geometry of the subducting Juan de Fuca crustal plate that plunges beneath the Cascade volcanic arc.

- Sponsorship of a workshop on geothermal resources of the Cascade Range. The workshop featured discussion of investigations of regional geology and tectonics, volcanic centers, hydrothermal systems, and research drilling programs. Results of continuing research in the Cascades were disseminated to a diverse group, including representatives of the geothermal- development industry, academia, and State and other Federal agencies.

- Participation in interagency efforts to plan and carry out scientific investigations in a DOE-sponsored drillhole to 10,000 feet in the Salton Sea geothermal system of southern California.

- Work with the National Park Service and the Department of Justice in evaluation of the hydrologic connection between geothermal areas outside of Lassen Volcanic National Park and the major geothermal system centered under the fumarole areas within the Park.

- Completion of a series of geologic, geochemical, electromagnetic, and seismic studies of San Miguel Island, Azores, (supported in part by the U.S. Agency for International Development and the Regional Government of the Azores), which resulted in a definitive evaluation of the Agua de Pau geothermal system.

- Completion of geologic maps of the Clear Lake volcanic field in California, the central part of the San Francisco Peaks volcanic field in Arizona, and Lava Beds National Monument in California.

- Publication of hydrologic and geochemical studies of the Soda Lakes and Upsal Hogback geothermal systems in Nevada and the Klamath Falls geothermal system in Oregon.

Program activities for FY 1986 include:

- Geological, geochemical, geophysical, and hydrological studies to evaluate the regional geologic and tectonic setting of geothermal systems in the Cascades Range, and to evaluate the degree to which subterranean flow of cold water masks deep hot geothermal reservoirs.

- Detailed geological and geophysical studies of volcanic centers in the Cascades to understand the characteristics of magmatic systems as heat sources in the Cascades.

- Studies of the nature of hydrothermal systems in the Cascades to assess the geothermal resources of the region.

- Geochemical and isotopic studies of geothermal fluids to: a) refine geothermometers; b) determine the chemical interactions between geothermal fluids and the rocks through which they circulate; and, c) understand reservoir processes that result from fluid withdrawal.

- Geologic mapping and radiometric (age-dating) studies to determine volumes and ages of young igneous systems throughout the United States as a guide to estimating the magnitude of the undiscovered geothermal resource.

- Determination of the physical mechanism(s) by which seismicity induced by geothermal development occurs at The Geysers field in northern California.

- Cooperation with the Department of Energy in direct sampling of the deep parts of hydrothermal convection systems and magmatic systems by deep drilling. These include scientific investigations in a DOE-sponsored drillhole to 10,000 feet near the Salton Sea in Imperial Valley, California, and in a drillhole sponsored by Sandia National Laboratory that penetrated into the silicic dike underlying the Inyo volcanic chain near Long Valley caldera, California.

Plans for program activities at the base level for FY 1987 include:

- Synthesis of information from multidisciplinary studies of regional tectonics, volcanic centers, and hydrothermal systems of the Cascade Range toward a regional assessment of the geothermal potential of the Cascades.

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will delay the revision of the current preliminary estimates of the undiscovered component of Cascades geothermal resources, and will also delay availability of resource-characterization models for use by other Federal and State agencies in developing a Cascades Geothermal Drilling Program.

In addition, research studies of the deeper parts of magma-hydrothermal systems will be reduced. This reduction will decrease the ability to differentiate the various types of geothermal resources--including hydrothermal convection systems, hot dry rock, and magma--associated with young igneous centers where most of the western United States geothermal resources occur.

Distribution of change by object class

The object class detail for the proposed $781,000 decrease is as follows:

	FTE-P	Amount
Personnel Compensation	-3	$88,000
Personnel Benefits		12,000
Travel and Transportation of Persons		27,000
Transportation of Things		25,000
Communications, Utilities, and Miscellaneous Charges		76,000
Printing and Reproduction		20,000
Other Services		300,000
Supplies and Materials		116,000
Equipment		117,000
Total		$781,000

World Energy Resource Assessment

Objectives: The objectives of the World Energy Resource Assessment Program are to provide geologic information and assessments on world energy resources (with a focus on oil and gas) as input, through other agencies, to national planning and policy decisions relative to energy use, availability, ownership, international trade, and foreign policy; a coordinating committee serves to effect the transfer of information among government agencies.

Base Program: The focus of the program is the development of petroleum assessments and production potential by country and by regions that encompass several countries. Resource assessments of coal, uranium, and oil shale also are being planned to provide the U.S. Government a base of information on the energy options available to a country or a region. At the specific request of other government agencies (e.g., Department of Energy, Department of State, Agency for International Development, Congressional Research Service), priorities for particular geographic areas and subject matters are selected for study. The foreign resource assessments are comparable in methodology and consistent with domestic assessments. The supporting geologic research complements the domestic research program.

To date, the program has completed the preliminary analysis of world crude-oil distribution, quantity, and quality which was published by the World Petroleum Congress; separate reports on many individual areas have also been published. The analysis of world natural gas will be completed in FY 1986. A particularly significant conclusion at this stage is that in spite of continued aggressive exploration in the past 10 years, world discovery has lagged production by some 80 billion barrels--which equals 4 times world annual production. Clearly, new exploration ideas and improved discovery efficiency remain essential to the discovery process which in turn is critical to continued adequate levels of production. Because continued exploration leads to modification of the data set and hence of assessments, the program must remain dynamic with continued investigations of evolving energy geology understanding throughout the world. This is basic to making informed decisions concerning the Nation's energy-related policies.

In FY 1986, a global natural gas resource estimate will be completed, new exploration data from South America, Mexico, Indonesia, and China will be evaluated, and an on-line computer capability to profile data for various countries will be implemented. In FY 1987, efforts will concentrate on developing countries; on update of exploration and development information for areas of significant resource potential (e.g. the Barents Sea); and on emerging frontier provinces (the Middle East as it relates to the Mediterranean, North and East Africa).

Recent accomplishments include:

o Completed an evaluation of the petroleum geology of Western China and East Siberia, and prepared a map of China showing four levels of favorability for petroleum exploration.

o Published a report on the petroleum geology of the Arctic that includes both U.S. territories and relevant areas of the U.S.S.R., Norway, Canada, and Greenland.

o Completed an evaluation of the petroleum geology and resource potential of South Asia.

o Completed assessment of the petroleum potential of worldwide offshore regions.

	Planned Workload		
	FY 1986	FY 1987 Base	FY 1987 Estimate
World Energy Summaries			
World natural-gas summary	1	0	0
Other energy resource summaries by individual areas	2	2	1
Petroleum summaries by individual areas	5	5	5

Resource area summaries-----------6 @ average cost of approx. $83,000 each

Justification of Program and Performance

Activity: Geologic and Mineral Resource Surveys and Mapping
Subactivity: Offshore Geologic Surveys

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Offshore Geologic Framework	$	24938		25055	24428	-627
	FTE-T	352		352	352	0
Coastal Erosion	$	1491		1491	0	-1491
	FTE-T	0		0	0	0
Total Requirements	$	26429	25293	26546	24428	-2118
	FTE-T	352	352	352	352	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
26,429	-1,136	25,293

The $1,136,000 reduction will require that heavy mineral surveys of the Eastern U.S. Continental shelf will be deferred, follow-up geological/geophysical surveys to the sonar mapping surveys will be reduced in scope, and preparation of the Continental Margin Map series will be slowed down.

Authorization

43 U.S.C. 31(a) and (b)	The Organic Act of 1879, as amended, provides basic authority for the Geological Survey to examine the geological structure, mineral resources, and products of the national domain as extended to include examinations outside of the national domain.
16 U.S.C. 1451-1456 P.L. 94-370.	The Coastal Zone Management Act Amendments of 1976 provide that each department, agency, and instrumentality of the Executive Branch of the Federal Government may assist the Secretary (of Commerce), on a reimbursable basis or otherwise, in carrying out research and technical assistance for coastal zone management.
43 U.S.C. 1865 P.L. 95-372.	The Outer Continental Lands Act Amendments of 1978 provide that the Secretary of the Interior shall conduct a continuing investigation, based on data

	and information which he determines has been adequately and independently audited and verified, for the purpose of determining the availability of all oil and gas produced or located in the Outer Continental Shelf, including oil and natural gas resources. The Geological Survey provides basic geologic and geophysical data and information from its research and field investigations as to the geological structure and mineral resources of offshore areas to the Minerals Management Service to meet the objectives of the OCS Leasing program.
30 U.S.C. 1419 et seq. P.L. 96-283.	The Deep Seabed Hard Mineral Resources Act of 1980 provides authorization for conducting a continuing program of ocean research that "shall include the development, acceleration, and expansion, as appropriate, of the studies of the ecological, geological, and physical aspects of the deep seabed in general areas of the ocean where exploration and commercial development are likely to occur...." The Geological Survey, based on expertise developed in regional offshore geologic investigations, provides geologic and mineral resource expertise in responding to the requirements of the Act.
43 U.S.C. 1301 P.L. 92-532	The Marine Protection, Research, and Sanctuaries Act of 1972 provides that the Secretary of Commerce must consult with the Secretary of Interior prior to designating marine sanctuaries. The Geological Survey provides information regarding the energy and mineral resource potential in areas being considered for designation as marine sanctuaries.

Offshore Geologic Surveys provide a synthesis of basic geological and geophysical information for the continental margins and adjacent slope and deep-ocean areas. The Offshore Geologic Framework Program establishes the structural and stratigraphic relations of the subsurface offshore and correlates the offshore geologic framework with geologic features onshore. These activities provide a basis for the appraisal of the regional aspects of energy and mineral potential and an understanding of the processes that govern deep sea mineralization and oil and gas accumulation. The program further provides insights into geologic processes that influence the transportation and accumulation of marine sediments. The President's Exclusive Economic Zone (EEZ) proclamation has increased the areas of submerged lands to be studied through Offshore Geologic Surveys from about 1 billion acres to over 3 billion acres. Nearly all these deep-water oceanic areas are frontier regions where geologic data are sparse and our knowledge of these subsea geologic provinces and the seafloor mineral resource potential is only rudimentary. The assessment of the geologic framework, conditions, and mineral potential of the EEZ began in FY 1984 and will continue in FY 1987. The Coastal Erosion Program adresses nationwide, shoreline retreat and land loss from the geological perspective as shore erosion is prominent along the coasts of several States. The geological evaluations take into account historical sea-level changes, the movement of sediment masses, oceanic influences, and manmade effects of sediment diversion. The program identifies highly vulnerable coastal areas, provides summaries of erosion rates and their causes, and identifies possible measures to counteract land loss.

Offshore Geologic Framework

Objectives: To conduct on a regional basis scientific investigations aimed at the systematic understanding and description of the geologic settings, energy and mineral resources, and conditions of the offshore areas of the United States.

Base Program: This program serves national needs by developing or extending our understanding of where mineral or petroleum resources occur, in what geologic framework such resources may exist, the geologic environmental conditions that may affect their future use, and how their formation in oceanic areas can help in the search for analogous onshore deposits of economic significance. The offshore domain covers approximately 30 percent more than the area of the onshore continental United States, and offshore geologic surveys are intended to discover and define elements of the geologic framework as part of a fundamental understanding of the crustal plate containing the United States. Program emphasis is on broad basic research in marine geology with the aim of providing information to various users and the concerned public, and the conveyance of geologic expertise regarding issues, concerns, and solutions to Federal, State, and local agencies involved in the management and leasing of offshore areas. This program is based on a continuing accumulation of data leading to an increased understanding of the geology of the submerged parts of the continent (the Continental Margin) and the areas of concern beyond.

Major goals of the program are (a) the synthesis of available information on the general geologic framework of the Continental Margins; (b) the seaward advancement of geologic knowledge, such as continued discovery of offshore basins prospective for petroleum and the continued discovery of valuable mineral deposits; (c) the predictive evaluation of the energy and mineral resource potential of regions, including the probabilistic assessment of the resources contained therein, for national planning purposes; (d) the study of fundamental marine sedimentary processes that shape the continental margins and influence their use; (e) the conduct of special topical studies, such as geochemical analyses and geotechnical engineering; (f) cooperative programs with coastal States in assessing offshore resources and environmental problems; and (g) a systematic mapping of the EEZ.

The program is conducted by means of marine geophysical and geologic surveys incorporating seismic-reflection and refraction profiling techniques; drilling, coring, and sampling of ocean floor sediments; instrumentation placed on or below the seafloor to measure certain parameters such as heat flow, seismicity, or near-bottom currents; and observations and measurements by diving or remote means. Ships of the Federal government, academic institutions, and the private sector are used to collect the data. Laboratory and computer-based analyses are interpreted and the results documented in reports and maps, all of which are publicly available.

The program is designed to assist other agencies of the Federal government such as the Department of State (evaluation of alternate offshore international boundaries), the Department of Energy (energy-related engineering issues and resource availability predictions), the Department of Defense (offshore gravity surveys) and the Minerals Management Service (offshore leasing). Cooperative programs with coastal States are conducted to provide the most recent technology and geologic expertise to State planning activities. This involves investigations of sand and gravel resources in coastal States' waters, and geochemical studies of pollutants in estuaries. In the international realm, on a reimbursable basis, the program assists the Department of State, the Agency for International Development, the United Nations, and other entities that require marine geologic expertise. In a cooperative manner, international activities are conducted, when advantageous, to obtain expertise and technology not available in the United States.

In addition, in keeping with Senate Report No. 98-578 "to implement an accelerated program principally concerned with understanding the geologic processes and conditions that govern the genesis of polymetallic sulfide deposits, exceptionally rich in minerals, found on the Gorda and the Juan de Fuca Ridges," the Survey is conducting a cooperative drilling program in FY 1986 with the Geological Survey of Canada to retrieve the samples necessary to the evaluate the economic significance of mineral deposits of these ridges.

This program has four subelements:

1. Marine deposits and sedimentary dynamics studies ($2,823) are focused on presently active geologic processes modifying the continental shelf, slope, and the deep seafloor. These studies are also key to the understanding of ancient similar processes that formed sedimentary deposits throughout geologic time. Topics of concern are the shape and distribution of major sedimentary bodies and the mechanics of their formation; the geologic conditions conducive to and the physics involved in large-scale mass failures (geologic hazards) on the ocean floor; and the dynamics of transport of sediments and pollutant dispersal on the continental shelf, slope, and rise, and in submarine canyons.

2. Regional geologic framework investigations ($8,197) of the Continental Margins and deep-ocean basins include studies of the regional stratigraphy, paleoenvironmental conditions, and structural setting of selected areas. All of these influence the formation of petroleum and mineral deposits. Research on tectonism, seismicity, magmatism, and volcanism are also conducted in relation to the formation of marine deposits, ocean-floor spreading, development of oceanic trenches, evolution of islands and landmasses, and hazards such as earthquakes. These activities lead to the analysis and interpretation of the evolution of Continental Margins and their changing physiography. Information obtained is used in ascertaining existing and past geologic settings as precursor to investigations of energy and mineral resources. This program subelement provides the basic information about deep-water geologic framework needed for the assessment of the EEZ.

3. Formation of marine energy and mineral deposits (\$5,034) studies are concerned principally with understanding the processes and conditions that govern the genesis of petroleum, metalliferous minerals such as sulfide deposits on the seafloor which generally contain nickel, cobalt, silver, and other strategic commodities, and non-metallic minerals such as phosphate on the Continental Shelves which is important to agriculture. As a result of the EEZ proclamation and congressional directives, special emphasis is being placed on studies of sulfide deposits on the Juan de Fuca Ridge off Oregon and Washington and conditions similar to that on the Gorda Ridge. These deposits, discovered by the Geological Survey, appear to be rich in metals but their extent and origin are just beginning to be probed. Other metallic deposits under investigation are cobalt-rich manganese crusts forming around the Hawaiian Islands and United States Trust Territory islands. The cobalt content of these crusts, if proved economical to extract, would be a significant domestic source of a critical commodity to the United States which is now an imported commodity. Because the search for mineral deposits continues to expand seaward into deeper waters and new geologic areas, and on account of their diversity offshore, several earth science disciplines must be merged to achieve significant results and to develop for them the proper geologic exploration models and resource evaluation methods.

4. Exclusive Ecomonic Zone (EEZ) surveys and mapping (\$8,374). In 1983, President Reagan proclaimed sovereign rights and jurisdiction of the United States over an "Exclusive Economic Zone" that extends for a distance of 200 nautical miles seaward of our shorelines. This extension of the national domain increased the area of the U.S. submerged lands from about one billion acres to more than three billion acres. Nearly all these deep-water oceanic areas are frontier regions where geologic data are sparse and our knowledge of subsea geologic provinces and the seafloor mineral resource potential is only rudimentary.

Because the enormous area included within the 200-nautical-mile economic zone precluded the possibility of equal and immediate attention to all of this frontier area, an intensive multidisciplinary mapping and resource appraisal program was initiated in FY 1984, starting initially with specific 2-degree "baseline corridors." These corridor syntheses have formed the basis of the current province investigations, and the initial preparation of the Continental Margin Map series, which will be a definitive summary of the geologic aspects of the EEZ. Emphasis in FY 1986 focused on analyzing, interpreting, and reporting on wide-swath (GLORIA) sonar data acquired for the EEZ off California, Oregon, and Washington in FY 1985, and on acquiring sonar image data of the seafloor in the EEZ off Puerto Rico, the Virgin Islands, and the Gulf of Mexico. Emphasis in FY 1987 will be on surveying the Alaskan and Hawaiian EEZ, using a U.S.-owned version of the GLORIA to be delivered in FY 1986, and analyzing and interpreting data acquired in FY 1985-86. Additional efforts proposed for FY 1987 will focus on accelerated mapping, on developing the subsurface geologic information for province investigations of the EEZ, and on preparation of EEZ products.

Recent activities and accomplishments for the offshore geologic surveys include:

- The FY 1985-86 wide-swath GLORIA sonar surveys have mapped the deep-water portion of the Gulf of Mexico and the EEZ of the Virgin Islands and Puerto Rico, and are to be supplemented by higher resolution SeaMARC sonar data where the geologic structures offshore warrant detailed mapping. An example is the deep-water Mississippi Fan where the potential for future discovery of petroleum is highest among other deep-water areas. During the transit between the Gulf of Mexico and Puerto Rico, GLORIA data were collected with the aim of defining the tectonic framework of the Northern Caribbean.

- The Continental Margin Map series, which will summarize available geologic and geophysical data and interpretations in folio format for the EEZ, has been initiated in the Atlantic and the Gulf of Mexico EEZ. The summaries are based on a newly-developed digital data base and geographic information system. Maps for the Atlantic will include seismic-reflection profiling, leasing, drilling activity data, and syntheses of geologic and geophysical studies. Information on tectonic structures for the Baltimore Canyon trough has been assembled, and interpretations of seismic stratigraphy, structure contours for various geologic surfaces below the seafloor, and derived sediment thicknesses have been completed. The base maps for these areas will be published in FY 1986. Derivative maps will become available in FY 1987.

- Summaries of the seismic and lithostratigraphic character of Tertiary units on the Continental rise off Georges Bank and the Baltimore Canyon have been completed.

- Substantial deposits of titanium minerals were discovered by the USGS on the Atlantic shelf. These minerals occur in the form of placer deposits.

- Investigations of the shallow and deep crustal structure of the northeastern U.S. margin are underway. Crustal structures, such as faults and rift basins, have been mapped south of Long Island to Nantucket and in the Gulf of Maine. A deep-penetration multichannel seismic-reflection profile acquired across the Gulf of Maine, designed to connect a continental deep-penetration seismic profile with a grid of multichannel seismic profiles acquired earlier on Georges Bank. A multichannel seismic-reflection and wide-angle seismic-refraction survey in the Gulf of Maine was completed in FY 1986, and results are being used to map the regional extent of shallow structures.

- Sonar data acquired in the FY 1984 GLORIA survey of the Pacific EEZ off California, Oregon, and Washington have been digitally processed and an atlas of image mosaics has been prepared.

- Construction of a U.S.-owned GLORIA system was begun with delivery scheduled for FY 1986.

- Surveys and sampling of the seafloor in the Hawaiian EEZ, near the Line Islands and the Mid-Pacific Islands o. the Pacific Ocean, to define the extent of potential cobalt resources on seamounts, continued in cooperation with West German scientists.

- Investigations to detect magma chambers by deploying offshore bottom seismometers, as well as surveys to map potential locations of hydrothermal discharge and to locate polymetallic sulfide deposits on the Juan de Fuca and Gorda Ridges, continued in FY 1985.
- Offshore sedimentary basins, based on data resulting from a two-month geological and geophysical survey of Wilkes Land and the Ross Sea of Antarctica, have been delineated.
- The FY 1984 surveys of the offshore areas of South Pacific island nations generated a considerable amount of geological and geophysical data that are presently being analyzed. Preliminary results indicate the existence of petroleum potential in Tonga and favorable settings for hydrocarbon accumulations in Vanuatu and the Solomons.
- Studies of the seafloor and subsurface geology, including sand and gravel resources of Long Island Sound, Delaware Bay, parts of Chesapeake Bay, Penobscot Bay, and inner shelf areas off Massachusetts, Connecticut, and Puerto Rico, have been completed.
- Gravity surveys in the Gulf of Mexico for the Defense Mapping Agency, conducted on a reimbursable basis, have been completed.
- Environmental studies of the Atlantic shelf and submarine canyon region have continued on a reimbursable basis for the Minerals Management Service. These studies evaluate sediment and pollutant transport, the potential for large-scale slumping, and other geologic hazards pertinent to offshore leasing.
- A synthesis of ocean-wide occurrence of ferromanganese crusts shows that average concentrations of cobalt are higher than previously known, and that the crusts for four major sectors of the Pacific Ocean have similar values at all depths.
- Analysis of a suite of surface sediment samples from the West Florida shelf, performed jointly with university researchers, shows a large phosphate anomaly extending outward into the shelf from Tampa Bay.

	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Program Summary				
Marine deposits and sedimentary dynamics	2,797	2,823	2,823	2,823
Regional geologic framework	9,094	8,640	8,824	8,197
Formation of marine energy and mineral deposits	5,174	5,034	5,034	5,034
EEZ	5,080	8,441	8,374	8,374
	22,145	24,938	25,055	24,428

Offshore Geologic Surveys	Planned Workload FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Marine depositional and sedimentological studies	12	12	12	12
Regional geologic framework studies	18	21	21	21
Formation of marine energy and mineral deposit studies	18	18	18	18
EEZ surveys, resource inventory, and scientific applications:				
Regional sonar-imaging surveys	3	5	5	5
High-resolution geophysical surveys	1	1	1	0
Sampling surveys	2	2	2	2
Province base-map compilation	3	3	3	3
Conmaps				
Start	5	5	6	6
Complete	0	5	5	6

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	25,055	24,428	-627
(FTE-T)	(352)	(352)	(--)

The Geological Survey will defer one geological/geophysical survey of the Gorda Ridge planned for FY 1987, and will, instead, concentrate its resources on sample analyses and estimates of volume and metal content of the one deposit discovered to date on the Ridge.

Object Class Distribution	Amount
Travel and Transportation of Persons	$25,000
Transportation of Things	24,000
Communications, Utilities, and Miscellaneous Charges	73,000
Printing and Reproduction	20,000
Other Services	270,000
Supplies and Materials	107,000
Equipment	108,000
Total	$627,000

Coastal Erosion

Objectives: The objective is to provide geological information about the nature, extent, and cause of coastal erosion as input to decisions pertaining to the arrest and/or mitigation of coastal retreat and land loss by various Federal and State agencies.

Base program: The focus of the program is on highly vulnerable coastal segments of the Louisiana barrier island system that has undergone, during the past decade or more, severe changes. These changes are manifested in the gradual migration of barrier islands, the shrinking of useable land comprising these islands, both along the coast and landward; the submergence of barriers by inundation of the sea that is partially caused by subsidence of coastal areas starved of sediment resupply; the canalization of coastal areas with attendant erosive effects caused by greater exposure to wave and wind forces; and the reduction of coastal land areas (retreating shorelines) as a result of the slow, but globally effective, rise in sea level.

In 1986, activities commence in Louisiana, whose coastal erosion is the severest of all States. Efforts will concentrate fieldwork along the barrier system west of the Mississippi delta. Regional geophysical surveys are being conducted, together with bathymetric surveys, to obtain information on present-day water depths and sedimentary thicknesses. These are being compared to historical data on barrier island position and nearshore bathymetry (under compilation), which will serve as a base for evaluating present erosional processes.

	Planned Workload			
Coastal erosion	FY 1985	FY 1986	FY 1987 Base	FY 1987 Estimate
Regional geophysical surveys	0	1	1	0
Detailed bathymetric surveys	0	1	0	0
Coring surveys	0	0	1	0
Oceanographic measurements	0	0	1	0

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	1,491	0	-1,491
(FTE-T)	(0)	(0)	(0)

The Geological Survey will discontinue its study of coastal erosion in Louisiana in FY 1987. Included in this cancellation are the initial efforts to measure wave and current forces under storm conditions. Estimating the sedimentary volumes along the western Louisiana coast, by means of coring and analysis of geophysical data obtained in FY 1986, that may be available for beach/barrier rehabilitation will also be cancelled. Data and analyses completed in FY 1986 will be made available to State agencies for their use. The lower priority assigned to this work is a product of the need to reduce Federal spending as a means of reducing the Federal deficit.

Object Class Distribution

The object class detail for the proposed $1,491,000 decrease is as follows:

	Amount
Travel and Transportation of Persons	$58,000
Transportation of Things	53,000
Communications, Utilities, and Miscellaneous Charges	160,000
Printing and Reproduction	43,000
Other Services	666,000
Supplies and Materials	254,000
Equipment	257,000
Total	$1,491,000

Water Resources Investigations
Subactivity/Element Change Crosswalk - FY 1986 Estimate
(Dollars in thousands)

Format of FY 1986 Congressional Budget	Amount 1986 Enacted	Format of FY 1987 Congressional Budget	Amount 1986 Enacted
Nat'l Water Resources Res. & Info.		Nat'l Water Resources Res. & Info.	
System-Federal Program	[illegible]	System-Federal Program	[illegible]
Data Collection & Analysis	[illegible]	Data Collection & Analysis	[illegible]
Nat'l Water Data & Info. Access Prog.	[illegible]	Nat'l Water Data & Info. Access Prog.	[illegible]
Coordination of Nat'l Water Data Act.	[illegible]	Coordination of Nat'l Water Data Act.	[illegible]
Regional Aquifer System Analyses	[illegible]	Regional Aquifer System Analyses	[illegible]
Core Program Hydrologic Research	[illegible]	Core Program Hydrologic Research	[illegible]
Improved Instrumentation	[illegible]	Improved Instrumentation	[illegible]
Water Resource Assessment	[illegible]	Water Resource Assessment	[illegible]
Toxic Substances Hydrology	[illegible]	Toxic Substances Hydrology	[illegible]
Nuclear Waste Hydrology	[illegible]	Nuclear Waste Hydrology	[illegible]
Acid Rain	[illegible]	Acid Rain	[illegible]
Scientific & Technical Publications	[illegible]	Scientific & Technical Publications	[illegible]
Nat'l Water Quality Assess. Prog.	[illegible] a/	Nat'l Water Quality Assess. Program	[illegible] a/
Nat'l Water Resources Research & Info.		Nat'l Water Resources Research & Info.	
System-Fed/State Coop Program-No Change	[illegible]	System-Fed/State Coop Program-No Change	[illegible]
Nat'l Water Resources Research & Info.		Nat'l Water Resources Research & Info.	
System-State Res. Instit. & Research		System-State Res. Instit. & Research	
Grants Program	[illegible]	Grants Program	[illegible]
State Water Resources Res. Institutes	[illegible]	State Water Resources Res. Institutes	[illegible]
Nat'l Water Resources Research		Nat'l Water Resources Res. & Tech. Dev	
Grants Program	[illegible]	Grants Program	[illegible]
Program Administration	[illegible] a/	Program Administration	[illegible] a/
TOTAL	[illegible]	TOTAL	[illegible]

a/ A new program element based on FY 1986 Congressional action.

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Activity Summary

Activity: Water Resources Investigations

Within the Federal Government, the Water Resources Investigations program of the U.S. Geological Survey (USGS) has the principal responsibility for appraising the Nation's water resources and for providing hydrologic information. To accomplish this mission, the USGS, in cooperation with State and local governments and other Federal agencies, conducts a balanced program of surveys, investigations, and research on the status of the Nation's surface- and ground-water resources. The components of the Water Resources Investigations program can be generally categorized as follows: (1) collecting, on a systematic basis, through a national network of hydrologic stations and sites, data needed for the continuing determination and evaluation of the quantity, quality, and use of the Nation's water resources; (2) conducting analytical and interpretive water-resource appraisals describing the occurrence, availability, and physical, chemical, and biological characteristics of surface and ground water; (3) conducting inhouse and extramural supportive basic and problem-oriented research in hydraulics, hydrology, and related fields of science to improve the scientific basis for investigations and measurement techniques and to understand hydrologic systems sufficiently well to quantitatively predict their response to stress, either natural or manmade; (4) disseminating the water data and the results of investigations and research through reports, computerized information services, and other forms of public releases; and (5) coordinating the activities of Federal agencies in the acquisition of water data for streams, lakes, reservoirs, estuaries, and ground waters in accordance with OMB Circular A-67.

The activities identified above are accomplished with funds requested herein, with cooperative funds provided by the States and municipalities, and with grant mechanisms established under the Water Resources Research Act of 1984. In addition, the USGS performs certain hydrologic activities consistent with its overall mission, on a reimbursable basis for other Federal Government agencies.

The collection and analyses of hydrologic data are basic and pertinent to all water programs of the USGS, to many of the activities of other Federal, State, and local agencies, and to public and private entities concerned with water-resources development, management, and conservation. Funding support for hydrologic data collection activities is derived solely or from a combination of three principal sources--the Geological Survey's appropriations, matching State and local funds under the Survey's Federal-State Cooperative Program, and reimbursements from other Federal agencies. The exhibit following the program element "Data Collection and Analysis" shows the number and types of hydrologic stations and their sources of support for FY 1985 (actual) and for FY 1986 (at the Enacted level) and FY 1987 (estimated).

The Geological Survey's areal appraisals, analytical studies, predictive studies, supportive research, model development, and model verification are dependent upon basic data on the quantity, quality, and use of surface and ground water. These activities also are basic and pertinent to the work of many other Federal, State, and local agencies and to public and private water agencies.

The results of these programs are made available to the public as publications and as releases of hydrologic data. Hydrologic data are available at offices in every State via computer terminals. The Water Resources Investigations activity prepared 1,220 reports for publication in FY 1984, and 1,500 in FY 1985. The estimate for FY 1986 is 1,500, and for FY 1987 is 1,550.

In addition to maintaining the programs described above, funds appropriated for this activity provide for scientific and technical program management and support, including development and maintenance of automatic data processing capability.

Justification of Program and Performance

Activity: Water Resources Investigations
Subactivity: National Water Resources Research & Information System - Federal Program

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Data Collection and Analysis	$	20482		20594	18445	-2149
	FTE-T	600		600	600	0
National Water Data and Information Access Program	$	2196		2196	1903	-293
	FTE-T	21		21	21	0
Coordination of National Water Data Activities	$	948		948	948	0
	FTE-T	21		21	21	0
Regional Aquifer System Analysis	$	14159		14184	12184	-2000
	FTE-T	160		160	160	0
Core Program Hydrologic Research	$	8082		8109	7408	-701
	FTE-T	207		207	207	0
Improved Instrumentation	$	1984		1984	1677	-307
	FTE-T	7		7	7	0
Water Resources Assessment	$	1352		1352	1352	0
	FTE-T	12		12	12	0
Toxic Substances Hydrology	$	11749		11768	11768	0
	FTE-T	174		174	174	0
Nuclear Waste Hydrology	$	7376		7393	3293	-4100
	FTE-T	78		78	57	-21
Acid Rain	$	3150		3150	2850	-300
	FTE-T	36		36	36	0
Scientific & Tech. Pubs.	$	2187		2187	2187	0
	FTE-T	30		30	30	0
National Water-Quality Assessment Program	$	2485		2485	3000	515
	FTE-T	50		50	50	0
Total Requirements	$	76150	72875	76350	67015	-9335
	FTE-T	1396	1396	1396	1375	-21

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
76150	-3275	72875

Data Collection and Analysis: Discontinue the collection of hydrologic data at 20 surface-water (continuous-record stream-discharge) and 40 ground-water (scheduled long-term water-level) sites. Reduce the planned level of activities associated with Indian water rights by about 10 percent. Reduce the frequency of the collection of water-quality data at sites in the National Stream Quality Accounting Network. Reduce the level of effort devoted to the conduct of hydrologic investigations related to oil shale. Defer rehabilitation, repair, and replacement of surface-water gaging stations damaged or destroyed by flooding, vandalism, and aging.

National Water Data and Information Access Program: Reduce by 480 the number of abstracts processed by the Water Resources Scientific Information Center (WRSIC). Some software development and hardware acquisitions for the redesign and integration of indexing systems for the National Water Data Exchange (NAWDEX) will be deferred.

Coordination of National Water Data Activities: Reduce regional water-data coordination activities. Reduce the pilot study in Ohio/Colorado involved in inventorying the availability of water-quality information and evaluating the utility of this information for use in answering national-scope questions concerning water-quality conditions and trends.

Regional Aquifer System Analysis: Extend the planned completion of two ongoing RASA Phase I investigations (two of the following: Central Midwest; Great Basin; Upper Colorado, or Oahu, Hawaii). Defer the planned FY 1986 start of the Phase I study of the Ohio/Indiana Carbonates and Glacial Aquifer System.

Improved Instrumentation: Reduce software development efforts associated with the acquisition, management, and analysis of real-time hydrologic data procured via satellite technology. Reduce some research projects involved in the development of new hydrologic instrumentation and sensors.

Water Resources Assessment: Reduce by about 50 percent projects summarizing sediment-transport patterns in rivers of the United States and evaporation estimates for major reservoirs. Planned efforts to estimate the amounts of changes of ground-water in storage in areas of ground-water mining will be deferred.

Toxic Substances Hydrology: Reduce the field investigation of ground-water contamination in Tar Creek, Oklahoma. Extend the schedule for the conduct of investigations of ground-water contamination at the Picatinny Arsenal, Morris County, New Jersey. Reduce process-oriented research and methods development associated with surface- and ground-water contamination issues. Reduce the scale of investigations at each of the three river basins which are the subject of intensive surface-water contamination studies (i.e., Calcasieu River in Louisiana; Whitewood Creek in South Dakota; and Upper Arkansas River in Colorado). Reduce studies involved in the characterization of trace inorganic and organic elements occurring in western ground water.

Nuclear Waste Hydrology: Reduce research and investigations associated with the development of methodologies for use in characterizing the hydrogeology of candidate high-level nuclear waste repository sites. Reduce process-oriented research regarding radionuclide transport in the unsaturated zone which relates to the shallow burial of low-level radioactive waste. Reduce the level of other research activities engaged in the modeling of processes related to radionuclide migration in the subsurface and development of predictive radionuclide transport models for use in site evaluation.

Acid Rain: Terminate pilot-scale program to determine concentrations of trace metals in wet deposition at six stations in the National Trends Network. Terminate efforts to develop a precipitation sampler suitable for the year-round sampling for trace metals, nutrients, and organic compounds in atmospheric deposition. Reduce the number of sensitive lakes and streams that are monitored to detect effects of atmospheric deposition on sensitive water bodies.

Scientific and Technical Publications: Increase the time required to complete scientific review and publish some reports. Defer acquisition of equipment for use in upgrading the graphics and typesetting stages of the publications process. Close one of the three regional centers involved in performing scientific editing and readying manuscripts for publication. Reduce information-outreach and scientific exhibits activities.

National Water-Quality Assessment Program: Initial year activities associated with the development/improvement of field and laboratory sampling and analysis procedures for trace elements and organic compounds will be reduced. The initiation of up to eight field investigations in surface-and ground-water areas will be delayed somewhat.

Authorization

43 U.S.C. 31 20 Stat. 394 P.L. 87-626 P.L. 98-473	(Organic) Act of March 3, 1879, that established the Geological Survey, as amended (1962); and restated in annual appropriation acts. The most recent annual act is Public Law 99-190, December 1985 "... to perform surveys, investigations, and research covering topography, geology, and the mineral and water resources of the United States ...."
42 U.S.C. 4331 *et seq.* P.L. 91-190	National Environmental Policy Act of 1969 (NEPA), requires prior-to-action determination that any major Federal action will not have a significantly adverse effect upon the environment. Consequently, the Geological Survey is called upon to provide

technical review or inputs to resource-related actions proposed by other Federal agencies.

33 U.S.C. 1251 et seq. P.L. 92-500 P.L. 95-217	Federal Water Pollution Control Act Amendments of 1972 and its successor, the Clean Water Act of 1977, authorize extensive water-quality planning, studies, and monitoring under the direction primarily of the Environmental Protection Agency (EPA). The Geological Survey is called upon to participate in many of these activities, partly by EPA and partly by State agencies in the Federal-State Cooperative Program.
42 U.S.C. 300f et seq. P.L. 93-523 P.L. 95-190	Pursuant to the Safe Drinking Water Act, as amended, the Geological Survey and EPA have an interagency agreement covering aquifer studies conducted by the Survey relating to sole-source aquifers (Sec. 1424e).
42 U.S.C. 6901 et seq. P.L. 94-580 P.L. 98-616	Resource Conservation and Recovery Act of 1976 (replacing the Solid Waste Disposal Act of 1965) and the Hazardous and Solid Waste Amendments of 1984 (P.L. 98-616) require EPA to promulgate guidelines and regulations for identification and management of solid waste, including its disposal. The Geological Survey's expertise is a present and potential source of assistance to EPA in defining and predicting the hydrologic effects of waste disposal. Public Law 98-616 also establishes a National Ground Water Commission, and names the Geological Survey as one of the principal agencies to assist the Commmission in carrying out its duties during FY 1985-1987.
P.L. 96-294	Title VII of the Energy Security Act (1980) calls for an "Acid Precipitation Program and Carbon Dioxide Study." The Geological Survey is an active participant in studies of acid precipitation as a result of prior work in this field in the Federal and Federal-State Cooperative Programs.
P.L. 96-487	As a result of the Alaska National Interest Lands Conservation Act (1980), the Geological Survey has made and may be called upon to make water studies pertinent to implementation of the act.
P.L. 96-510	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) establishes a "superfund" to pay in part for the massive cleanup programs needed at sites that are heavily contaminated with toxic wastes. The Geological Survey is called upon by EPA and State agencies to investigate and determine the extent of contamination and remedial measures at some of these sites.

63 Stat. 145 P.L. 81-82 (Arkansas River Compact) 65 Stat. 663 P.L. 82-231 (Yellowstone River Compact)	Congress has granted its consent to many interstate water compacts. For such compacts, the Geological Survey provides administrative support for the Federal representative, usually appointed by the President. Also, the Geological Survey collects hydrologic data for 25 interstate compacts. The data collection is supported partly by the Federal Program and partly by the Federal-State Cooperative Program.
P.L. 93-322	Special Energy Research and Development Appropriation Act, 1975, provided funds "for energy research and development activities of certain departments ...." The Geological Survey's water resources investigations in oil shale hydrology support that legislation.
42 U.S.C. 2021b et seq. P.L. 96-573	Low-Level Radioactive Waste Policy Act of 1980 requires intra-State or multi-State (regional) arrangements for disposal of low-level radioactive waste by July 1, 1986. The Geological Survey is providing geohydrologic research and technology to Federal and State agencies developing plans for low-level waste management prior to the 1986 deadline.
P.L. 97-425	Nuclear Waste Policy Act of 1982 on disposal of high-level radioactive wastes defines DOE as lead agency with responsibility for siting, building, and operating high-level radioactive-waste repositories. The law requires participation by the Geological Survey in a consultative and review role to the DOE.
43 U.S.C. 1701 et seq.	As part of the implementation of The Federal Land Policy and Management Act of 1976, the Bureau of Land Management (BLM) enlists the Geological Survey's hydrologic data base and expertise in connection with BLM's responsibility regarding coal reserves on and beneath Federal lands.
30 U.S.C. 1201 et seq.	Surface Mining Control and Reclamation Act of 1977, as amended, established the Office of Surface Mining Reclamation and Enforcement (OSM). OSM depends in part upon the Geological Survey for a determination of the probable hydrologic consequences of mining and reclamation operations.
P.L. 98-434	High Plains States Groundwater Demonstration Program Act of 1983, authorizes the Bureau of Reclamation to carry out a 5-year program to investigate and establish demonstration projects for groundwater recharge of aquifers in eight "High Plains States" (Colorado, Kansas, Nebraska, New Mexico, Oklahoma,

South Dakota, Texas, and Wyoming). While carrying out this program the Bureau is directed to "consult with" the U.S. Geological Survey and others.

Data Collection and Analysis

Objective: To collect, analyze, interpret and make available data and information on the quantity, quality, and location of the Nation's ground and surface waters. Specific objectives are:

- To operate surface- and ground-water data collection networks with emphasis on information about water-short areas, urban complexes, energy development, floods, droughts, and environmental concerns.
- To provide information on the quality of the water of the Nation and to identify and interpret changes and trends in the quantity and quality of the Nation's major rivers using data from the National Stream Quality Accounting Network and other water-quality and streamflow data networks.
- To operate a national network of hydrologic benchmark stations to study time-dependent trends and to serve as controls for distinguishing natural from man-caused changes in hydrologic regimes.
- To provide the hydrologic data needed in response to decrees of Federal courts and river basin compacts.
- To provide the hydrologic data needed in areas where the Federal Government is the principal land owner.
- To provide review and comments on environmental documents and develop environmental policy and guidance for the Geological Survey.
- To provide training and operational support for water-resources activities.
- To provide hydrologic data in support of planning future development of the Nation's oil shale resources.

Base Program: Although the information is used throughout the water community, the water-data collection, resources investigation, and research activities included in this program component support that part of the Geological Survey's National Water Resources Research and Information System in which the Federal interest is paramount, including compacts, public lands, rivers and aquifers that cross State boundaries, and other areas of interstate or international concern.

Many data have been and are being collected, yet there remain some deficiencies in the temporal and geographical distribution and in the kinds of data available. This situation exists not only because of growth and shifts of the population and depletion of some local sources of water, but also because of the need for development and management of water resources on a regional and national basis which requires supporting data. The entire stream-gaging program of the USGS, which includes gaging stations funded by the Federal Program, the Federal-State Cooperative Program, and the reimbursable program is being systematically analyzed to improve its effectiveness. This analysis includes the identification of alternate methods, such as flow routing and statistical regression models, of providing streamflow information.

The following activities are modified somewhat from year to year in response to the increasing and changing stresses on the Nation's water systems. Details on the level of hydrologic data collection activities are included in Figure W-1.

- Streamflow and river, lake, and reservoir stage will be measured.

- Ground-water levels and pumpage will be measured.

- Data will be collected on all major floods during the year.

- The National Stream Quality Accounting Network (NASQAN), which began in 1973, provides a basis for continuously assessing the quality of major rivers in the United States with respect to both natural and human-induced factors. Most NASQAN stations are located on large rivers to measure the quantity and quality of water moving from one drainage basin to another. Existing station locations were chosen to represent hydrologic accounting units according to a hydrologic subdivision of the United States. NASQAN data thus provide a regional and national picture of water quality, as influenced by human activities, in the major rivers. Some of these NASQAN stations will constitute the "core" stations in the new FY 1986 National Water-Quality Assessment Program of the Geological Survey. In FY 1986, an evaluation of NASQAN will be made to determine future changes in location of stations, sampling frequency, and parameters measured to more fully support the new National Water-Quality Assessment initiative.

- Water-quality and water-quantity records are collected at about 80 stations located on streams at international boundaries, interstate compact points, and other sites where certain specific interests of the United States are served by monitoring water quality and quantity.

- The Hydrologic Benchmark Network includes the collection of water-quantity data at 59 sites and water-quality data at 52 of the 59 sites in small drainage basins to provide background hydrologic information for areas that are virtually unaffected by human activities.

- Water quality will be determined on a periodic basis at surface-water and ground-water sites. Sediment records will also be obtained.

- Maintenance and rehabilitation of network stations--damage due to weather, vandalism, and aging require reconstruction, relocation, and/or maintenance at frequent intervals at many sites. Occasionally, gaging stations require more extensive maintenance and improvements for longevity and safety of personnel who must enter the structures to do their work. Continuity of data collection is assured at a well-maintained station, and the long-term costs for station maintenance are less when routine maintenance is performed.

- Research continues to develop analytical methods and field techniques for evaluating water quality. Work will include development of: (1) more precise and rapid analytical methods for analysis of trace metals, pesticides, and other organic substances in water; and (2) more reliable techniques for collecting sediment data. Emphasis in FY 1986 and FY 1987 will continue on improving the capability for measuring organics in both suspended and bed sediments.
- Efforts to conduct hydrologic appraisals to assist with quantification of Indian water rights will be continued. Also, in FY 1986, additional test wells will be drilled to define the hydrogeology of the San Andreas-Glorieta aquifer system in the Grants-Blue Water area of New Mexico.
- The review and analysis of environmental documents will be coordinated.
- Assistance will be provided for the professional and technical development of the Survey's hydrologic work force and to support the chairpersons of eight interstate and/or international water compacts.
- Proposed extraction methods for oil shale will potentially impact the environment. The impact can be mitigated by a thorough scientific understanding of the interactions involved which can be achieved through monitoring of surface- and ground-water quality and quantity.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Data Collection Activities		(See Figure W-1)		
Review Environmental Documents	1,740	1,720	1,800	1,800
Training Sessions	40	40	40	40
Support for Interstate and International Water Compacts	8	8	8	8
Number of Oil Shale Basins Under Investigation	3	3	3	--

Average unit costs for program outputs in FY 1987 Estimate:

Review Environmental Documents	1,800 @	$ 300
Training Sessions	40 @	$ 25,000
Support for Interstate/International Compacts	8 @	$ 5,000

WATER DATA COLLECTION ACTIVITIES OF THE U.S. GEOLOGICAL SURVEY

Types of Stations

CONTINUOUS RECORD: The station is instrumented to monitor hydrologic conditions continually and, in some instances, transmit data in near real time.

PARTIAL RECORD: Hydrologic information is collected only during selected periods, for example, during floods.

SCHEDULED, LONG-TERM: Hydrologic information is collected on a fixed schedule over a long period to detect trends.

SHORT-TERM OR PROJECT: Hydrologic information is collected to meet the needs of a specific study. Data supplement those available from scheduled, long-term; continuous record; and partial record stations.

Number of Stations

COLUMN A - Stations totally supported by funds appropriated to the Geological Survey Federal Program subactivity.

COLUMN B - Stations supported by funds appropriated to the Geological Survey Federal-State Cooperative Program subactivity.

COLUMN C -Stations totally supported by reimbursement from other Federal agencies.

COLUMN D - Stations supported by a combination of two or more of the above.

Types of Stations	FY 1985 (Actual) -- Number of Stations				
	A. Federal Program	B. Federal-State Cooperative Program	C. Other Federal Agencies	D. Combined Support	Total
SURFACE WATER					
Discharge					
Continuous record	554	3,223	1,607	1,635	7,019
Partial record	84	3,013	293	667	4,057
Stage Only--Streams					
Continuous record	13	198	212	24	447
Partial record	14	418	45	30	507
Stage Only--Lakes/Reservoirs					
Continuous record	21	338	254	169	782
Partial record	11	278	67	49	405
Quality					
Continuous record	111	284	252	96	743
Scheduled, long-term	519	1,346	352	229	2,446
Short-term or project	74	718	124	61	977
GROUND WATER					
Water Levels					
Continuous record	94	1,783	215	192	2,284
Scheduled, long-term	814	19,487	1,501	3,221	25,023
Short-term or project	2,973	7,411	974	636	11,994
Quality					
Scheduled, long-term	52	3,796	193	293	4,334
Short-term or project	546	3,709	468	206	4,929

Figure W-1

Types of Stations	A. Federal Program	B. Federal-State Cooperative Program	C. Other Federal Agencies	D. Combined Support	Total
	FY 1986 (Enacted) -- Number of Stations				
SURFACE WATER					
Discharge					
Continuous record	560	3,220	1,520	1,700	7,000
Partial record	80	3,020	290	670	4,060
Stage Only--Streams					
Continuous record	10	200	210	30	450
Partial record	10	420	50	30	510
Stage Only--Lakes/Reservoirs					
Continuous record	20	340	250	170	780
Partial record	10	280	70	50	410
Quality					
Continuous record	110	280	250	100	740
Scheduled, long-term	510	1,350	350	230	2,440
Short-term or project	100	720	130	60	1,010
GROUND WATER					
Water Levels					
Continuous record	90	1,780	20	190	2,280
Scheduled, long-term	810	19,490	1,500	3,220	25,020
Short-term or project	2,970	7,410	970	640	11,990
Quality					
Scheduled, long-term	50	3,800	190	290	4,330
Short-term or project	550	3,730	470	200	4,950
	FY 1987 (Estimate) -- Number of Stations				
SURFACE WATER					
Discharge					
Continuous record	500	3,100	1,520	1,700	6,820
Partial record	80	3,020	290	670	4,060
Stage Only--Streams					
Continuous record	10	200	210	30	450
Partial record	10	420	50	30	510
Stage Only--Lakes/Reservoirs					
Continuous record	20	340	250	170	780
Partial record	10	280	70	50	410
Quality					
Continuous record	110	280	250	100	740
Scheduled, long-term	510	1,350	350	230	2,440
Short-term or project	100	720	130	60	1,010
GROUND WATER					
Water Levels					
Continuous record	90	1,580	20	190	1,880
Scheduled, long-term	710	19,140	1,500	3,220	24,570
Short-term or project	2,970	7,410	970	640	11,990
Quality					
Scheduled, long-term	50	3,650	190	290	4,180
Short-term or project	550	3,730	470	200	4,950

Figure W-1 (continued)

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	20,594	18,445	-2,149
(FTE-T)	(600)	(600)	(--)

The following activities will be either discontinued or curtailed as a result of the funding decrease:

Discontinue collection of hydrologic data at approximately 60 surface-water (continuous-record stream-discharge) and 100 ground-water (scheduled long-term water-level) sites; efforts will be made to select those sites for discontinuance in such a way as to lessen the impact on the needs of Federal, State and local agencies for hydrologic information, particularly the National Weather Service with respect to flood forecasting/warning. Defer maintenance and rehabilitation of some stations in the national network. Reduce the frequency of collection of water-quality data at the National Stream Quality Accounting Network (NASQAN) and Hydrologic Benchmark stations. Reduce research efforts to develop analytical and field techniques for evaluating ambient water-quality conditions. Terminate activities associated with appraising the hydrologic implications of oil shale development. Reduce the hydrologic investigations associated with the Acoma/Pueblo Indian tribe in New Mexico to the FY 1985 level of activity.

Distribution of change by object class:

The object class detail for the proposed $2,149,000 decrease is as follows:

	Amount
Travel and Transportation of Persons -	$ 108,000
Transportation of Things -------------	73,000
Communications, Utilities, and Misc. Charges ----------------------	221,000
Printing and Reproduction ------------	59,000
Other Services -----------------------	920,000
Supplies and Materials ---------------	396,000
Equipment ----------------------------	372,000
Total ------------------------	$ -2,149,000

National Water Data and Information Access Program

Objective: To develop and maintain a national program for compiling and disseminating scientific and technical information about water resources, water resources research, and technology development to help avoid the duplication of costly research and to build on the work of the past; and to improve and expand the availability of water data to all users through a linkage of water-data collection and water-data user organizations in the Federal and non-Federal sectors to aid in reducing costly duplication of data collection.

The National Water Data and Information Access Program comprises two operational programs: The National Water Data Exchange (NAWDEX) and the Water Resources Scientific Information Center (WRSIC). Both programs work cooperatively with other Federal and State agencies to compile, index, and abstract scientific and technical information and water data, and to provide assistance to those needing water data and information.

Base Program: WRSIC is a national program for acquisition, indexing, and abstracting of scientific and technical literature in the water resources field, and for dissemination of information about this literature. The computerized WRSIC published literature data base of about 175,000 abstracts is utilized nationally and internationally as the authoritative United States bibliographic data base in water resources. It is computer searchable Government-wide through the Department of Energy's RECON system, and it is searchable nationally and internationally by using commercial on-line systems which lease the WRSIC tapes. This program involves annually abstracting technical articles from scientific literature worldwide and preparing a monthly publication of "Selected Water Resources Abstracts." The computerized data base is updated on a monthly schedule, and the bibliographic user-service program is available to all Federal agencies, universities, State agencies, and other organizations that use water research information. Use of the WRSIC data base with its international coverage of all aspects of water resources enables: (1) researchers throughout the world to avoid redoing what others have done and to advance the state-of-the-art by building on the work of their predecessors; (2) administrators and managers to seek and find solutions to water problems; (3) engineers to find new technology in their development and construction of processes and equipment; and (4) non-specialists to find general quality and/or quantity reviews and inventories of water resources with associated problems and solutions.

The WRSIC data base services include: (1) access to the data base; (2) computer searches by author, descriptor, classification category, text of abstract, or corporate author; (3) document identification and ordering information; and (4) referral to information sources.

Work begun in FY 1985 to increase comprehensiveness of the literature covered by WRSIC, particularly of non-Department of the Interior government-sponsored or produced reports, will continue in FY 1986 and FY 1987.

NAWDEX is a nationwide interagency program comprising a growing voluntary-participation membership of more than 270 (FY 1985) Federal, State, local government, academic, and private water-oriented organizations. This interagency program is in response to the provisions of OMB Circular A-67 to maximize water-data use, to provide data, and to assure effective data resources use through a water-data coordination program. It is the major focal point for information about water data, the exchange of water data, and related programs. The program also provides nationwide data services, such as water-data indexing and source identification, search assistance, data dissemination, and data-request referrals to aid water-data users in locating and acquiring hydrologic information and numeric data. Services are available to the scientific community and water-resources managers through a national network of 76 Assistance Centers in 45 States and Puerto Rico.

The NAWDEX program is responsible for administering and managing the following activities: (1) developing program policies and service procedures; (2) providing technical assistance to users of water data and NAWDEX computer data bases; (3) maintaining a computerized inventory of hydrologic data and data sources which provide principal input to the national catalog of information on water data; (4) coordinating direct access to the NAWDEX data bases and two major Federal water-data computer files, the U.S. Geological Survey's National Water Data Storage and Retrieval System (WATSTORE) and the U.S. Environmental Protection Agency's Storage and Retrieval System (STORET); (5) responding to requests for water data and information and coordinating 76 Assistance Centers nationwide; and (6) related support functions. Other Federal and non-Federal organizations participate in NAWDEX on a voluntary basis.

Data exchange programs have been established with other bureaus of the Department of the Interior, the National Oceanic and Atmospheric Administration, the Environmental Protection Agency, the Canadian Department of the Environment, and several State governmental data systems. Through FY 1985, over 445,000 data sites were indexed from which data are available for more than 430 data-collecting organizations. Additional indexing of data-sites is anticipated annually, as shown on the following table of outputs for NAWDEX. By FY 1985, over 850 water-oriented organizations were identified as potential information sources in the Water Data Sources Directory (WDSD). As noted above, data from over 430 of these organizations have been indexed into the NAWDEX system. Direct access is maintained with major Federal water-data systems, facilitating automated indexing and dissemination of the water data collected. A membership-wide program for the manual indexing of water data is also maintained.

Work began in FY 1985 to enhance the hydrologic data management capability of the USGS and to improve the availability of existing data to all users, both Federal and non-Federal. As part of this effort, the NAWDEX computer files are being integrated with other USGS water data files to form a single interactive system for searching and accessing water data. Software is being developed for the NAWDEX program to enhance the capability of the program to respond to inquiries.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
WRSIC:				
Number of Abstracts to be processed (per year)	7,300	8,350	8,500	7,200
Number of Inquiries to Computer Search System by WRSIC Users (per year)	975	980	1,000	1,000
Number of Articles screened (per year)	11,525	11,750	11,950	11,950
NAWDEX:				
Additional Data Sites indexed (per year)	3,950	3,900	3,900	3,900
Data Response and Access Transactions (per year)	84,000	84,500	85,000	83,000

Average cost per WRSIC abstract: $50.00.
Average cost per NAWDEX data site indexed: $10.00.

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	2,196	1,903	-293
(FTE-T)	(21)	(21)	(--)

The number of abstracts processed by WRSIC will be reduced by 1,300. Work begun in FY 1985 to increase comprehensiveness of the literature covered by WRSIC, particularly of non-Department of the Interior government-sponsored or produced reports, will be deferred to outyears. Nearly all work begun in FY 1985 to integrate NAWDEX computer files with other USGS water data files to improve user access will be deferred. The level of technical assistance provided to users of NAWDEX and other USGS water data bases will be reduced.

Distribution of change by object class:

The object class detail for the proposed $293,000 decrease is as follows:

	Amount
Travel and Transportation of Persons -	$ 11,000
Transportation of Things -------------	10,000
Communications, Utilities, and Misc. Charges ----------------------	30,000
Printing and Reproduction ------------	8,000
Other Services -----------------------	111,000
Supplies and Materials ---------------	47,000
Equipment ----------------------------	76,000
Total -----------------------	$ -293,000

Coordination of National Water Data Activities

Objective: To coordinate the water data acquisition activities of all Federal agencies. Office of Management and Budget Circular A-67 assigns lead responsibility for water-data coordination to the Department of the Interior. Primary responsibility is further delegated to the Office of Water Data Coordination (OWDC) within the Geological Survey. Major mandates of Circular A-67 include: (1) exercising leadership in achieving effective coordination of water-data acquisition activities (such activities to include data collection, processing, publication, and storage); (2) preparing annually the Federal Plan for Water-Data Acquisition and conducting a continuing and systematic review of Federal water-data acquisition activities; (3) maintaining a central catalog of information on water data for the Nation; (4) designing the national water-data network; and (5) providing information on the availability of water data and facilitating interagency consultation in the acquisition of water data.

Base Program: OWDC meets these objectives by (1) collecting, analyzing, and distributing information on the water-data needs, plans, and acquisition activities of Federal agencies and selected non-Federal entities; (2) operating a coordination network of headquarters and field committees and staffs for sharing information and for cooperative work on water-data coordination activities; (3) reviewing and documenting the comparability and compatibility of water data; (4) investigating and reporting on the usability and capability of water-data bases and access systems; (5) monitoring, improving, and developing methods for making data available to users; (6) recording changes in the national network of stations for collection of data on the quality and quantity of streams, lakes, reservoirs, estuaries, and ground waters; and (7) serving as Executive Secretariat to the (Federal) Interagency Advisory Committee on Water Data and the (non-Federal) Advisory Committee on Water Data for Public Use.

The program is carried out in cooperation with other organizational units of the Geological Survey at the headquarters and field level, 30 other Federal agencies, and hundreds of non-Federal entities. They provide significant technical assistance, policy advice, and other resources to assure the success of the program.

Specific activities underway and planned include the following:

- Provide support (FY 1985 - FY 1987) for pilot studies in selected States to determine the extent that existing water and water-related data collected by various public agencies, for varying purposes, using differing procedures can be aggregated for use in answering national-scope questions concerning water-quality conditions and trends.

- Convene the Fourth Federal Interagency Sedimentation Conference and special sessions on water-data acquisition at national meetings of technical societies in FY 1986.

- Revise the Federal Information Processing Standards for Hydrologic Unit Codes and names in Alaska in FY 1986.

- Efforts will be made in FY 1986 to strengthen coordination of real-time hydrologic data systems by establishing clear communication channels and developing standardized data exchange formats.

- Begin efforts in FY 1986 to strengthen regional level data coordination for selected major river basins, such efforts to continue into FY 1987.

- Begin in FY 1986 to improve information on the characteristics of the national water-data networks; and prepare a report describing the status of the Nation's water-data networks in FY 1987.

- Expand liaison, in FY 1987, with representatives of non-Federal water-related organizations, particularly national water-resources task forces, such as the Environmental and Energy Study Institute.

Recent accomplishments include:

- Developed recommended Federal definitions for ground-water contamination terms.
- Improved the coordination of hydrometerological data.
- Printed and distributed a revision to Chapter 5 (Chemical Quality of Water and Sediment) of the National Handbook of Recommended Methods for Water-Data Acquisition.
- Developed and will continue to operate a system for identifying the water-data collection and acquisition activities stated or implied in Federal legislation.
- Established a mechanism for coordinating water-use information.

Regional Aquifer System Analysis (RASA)

Objective: To evaluate the availability and general chemical quality of ground water in regional aquifers and to understand the ground-water flow systems, including the recharge-discharge characteristics of the aquifers and the hydrogeologic and geochemical controls that govern the response of the aquifer systems to stress, thus providing the essential information and criteria required for development and management of water supplies.

Base Program: This program is currently developing information on the quantity and quality of water in regional ground-water flow systems, which together represent a significant part of the Nation's water supply. Twenty-eight of the most important aquifer systems have been identified for study. Depletion of surface-and ground-water supplies in some regions has reached severe proportions. Moreover, large increases in withdrawal from the Nation's ground-water systems are expected to occur during the coming decade as a result of increased irrigation, water needs for energy and industrialization, water demands of urbanizing areas, limited new surface reservoir capacity, and the desire to establish drought-resistant water-supply systems. The resulting impact of these increased withdrawals may be regional in scope, and an ability to evaluate and understand these regional impacts is essential for successful water management. In some parts of the country, increased pumpage will have an impact on Federal lands and on Federal investments in land and water development. Cities, industries, agriculture, communities, parks, recreation, and fish and wildlife will be impacted. Agricultural production is an example of the economic significance of these impacts. Phasing out of crop irrigation in areas of imminent water shortage or excessive water-quality degradation due to irrigation return flows would have profound economic effects, not only within those areas, but throughout the Nation.

The basic study of an aquifer system is designated as a Phase I investigation. Although each investigation is designed to fit the particular problems of the study area, the general approach is to develop a computer simulation for the overall aquifer system, supported by more detailed simulations of local or subregional problem areas. These simulations assist in forming an understanding of the natural (prepumped) flow regime and the changes brought about by human activities; and they provide a means of evaluating the impacts of increase in future pumpage, artificial recharge, waste disposal or other stresses, and will provide much of the information needed for water management. Hydraulic effects are simulated in all studies. In some studies, certain associated effects, such as land subsidence, are the subject of corollary simulations. The simulations are based upon a full assemblage of existing data and the collection of data as required to fill critical gaps in the available information, which in some cases is extensive. The studies consider water quality as well as quantity; and, in each case, efforts are made to interpret the observed water-quality distribution in terms of the original flow regime and the changes that have occurred or that might occur in response to human activities. Products from each study consist of a series of reports, beginning with summaries of data collected and assembled, and culminating in interpretive reports including the results of simulations.

In some instances, where technical problems of particular importance have been identified during the course of regional Phase I investigations, and where the technical information and analysis are unlikely to be developed under other programs, a second phase of project activity may be initiated. Such Phase II studies are of limited scope and duration and are restricted to activities that promise exceptional scientific return or contribution to major improvements of ground-water resources management.

Six ongoing Phase II investigations in FY 1985 and FY 1986 are as follows:

- Snake River Plain--better define the flow system in the Thousand Spring and American Falls area.
- High Plains--model the impact of future development and calibrate the water-use determinations from LANDSAT images.
- Central Valley, California--study changes of water quality caused by irrigation return flows and the potential impact on ground-water development of a deep-seated brine.
- Northern Midwest--model the impact of Chicago-Milwaukee pumping on the aquifer system.
- Southwest Alluvial--study the mechanics of vertical fissures created as a result of land subsidence associated with the withdrawal of ground water in Central Arizona; further study of geochemical processes related to ground-water flow in intermontane basins in the southwestern United States.
- Floridan Aquifer--evaluate the impact of water exchange between the Floridan aquifer and the overlaying sand aquifer, which were modeled separately and the potential movement of saltwater and freshwater interface near Hilton Head Island in South Carolina (to be completed in FY 1986).

Two new Phase II investigations planned for FY 1987 are as follows:

- Atlantic Coastal Plain--to study the saltwater and freshwater interfaces, and their impact on ground-water development.

- Central Midwest Carbonates--to integrate information and synthesize the flow systems underlying the Great Plains, Central Lowlands, and Interior Plains in the entire Midwest area. The aquifer systems in the area have been studied in four separate RASA projects (High Plains; Central Midwest Carbonates; Northern Great Plains; and Northern Midwest). The integration of the information as a whole is not only important to ground-water development, but also is critical to mineral development such as oil, gas, and strategic minerals.

At the end of FY 1986, 12 Phase I investigations will have been completed since the program began in FY 1978: Northern Great Plains; High Plains; Central Valley, California; Floridan Aquifer; Snake River Plain; Southwest Alluvial Basin; Northern Midwest; Atlantic Coastal Plain; Central Midwest; Great Basin, Nevada/Utah; Upper Colorado River Basin; and Oahu, Hawaii.

The number and types of investigations conducted in FY 1985 and planned for FY 1986 and FY 1987 are shown in the following table. In FY 1986, four Phase I investigations will be completed (Central Midwest; Great Basin--Nevada/Utah; Upper Colorado River Basin; and Oahu, Hawaii); and two Phase I studies will be started (Central Texas; and Ohio-Indiana Carbonates/Glacial Valleys); one Phase II investigation will be completed (Floridan Aquifer). In FY 1987, two Phase I investigations will begin (Appalachian Valleys and Piedmont; and Northern Rockies Intermontane Basin); two Phase II studies will be started (Atlantic Coastal Plain; and Central Midwest).

The Phase I investigation of the Alluvial Basin, California, will continue to be temporarily suspended in order to divert additional dollar and manpower resources to the Phase II study of the extent of the contamination of ground water in the southern portion of the Central Valley, California.

Table--Regional Aquifer System Analysis Program Outputs

Activities of the RASA Program are summarized below. With regard to the average unit costs associated with these activities, it is important to note that the actual annual costs for various RASA investigations vary widely depending upon the location of study, the stage of the multi-year investigations, and the complexity of topics which are the subject of follow-on (Phase II) studies.

	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Funding ($ in thousands)	14,401	14,159	14,184	12,184
PHASE I Investigations Underway (dashed line = ongoing studies)	(12)	(13)	(11)	(8)
Atlantic Coastal Plain	Complete			
Southeast Coastal Plain	---------	---------	---------	---------
Central Midwest	---------	Complete		
Gulf Coastal Plain	---------	---------	---------	---------
Great Basin--Nevada/Utah	---------	Complete		
Northeast Glacial Valleys	---------	---------	---------	---------
Upper Colorado	---------	Complete		
Oahu, Hawaii	---------	Complete		
Columbia Plateau	---------	---------	---------	---------
Alluvial Basin, California	Suspend			
Michigan Basin	---------	---------	---------	---------
Caribbean Islands	---------	---------	---------	---------
San Juan Basin of New Mexico/ Colorado	Begin ----	---------	---------	---------
Ohio-Indiana Carbonates and Glacial		Begin ----	---------	Suspend
Central Texas		Begin ----	---------	---------
Appalachian Valleys and Piedmont			Begin	Postpone
Northern Rockies Intermontane Basin			Begin	Postpone
PHASE II Investigations Underway	(6)	(6)	(7)	(7)
High Plains	---------	---------	---------	Complete
Central Valley, California	---------	---------	---------	---------
Northern Midwest	Begin ----	---------	---------	---------
Floridan Aquifer	---------	Complete		
Snake River Plain	---------	---------	---------	---------
Southwest Alluvial	Begin ----	---------	---------	---------
Atlantic Coastal Plain			Begin ----	---------
Central Midwest			Begin ----	---------

Average unit costs for FY 1987 Estimate:

Phase I studies	8 @ $890,000
Phase II studies	7 @ $705,000

Figure W-2

Some recent accomplishments of the RASA Program include:

- The use of computer models to simulate the dynamic three-dimensional flow in the regional aquifers. During the investigations, simulation capabilities have been evolved from the normal flow simulations to incorporating the effects of temperature in the deep circulation zones, the effects of salt concentration on ground-water flow, the effects of wells penetrating many aquifer layers that "short-circuit" a flow system among several separated individual aquifers, and the land subsidence due to withdrawals.

- The analysis of digitized satellite imagery to establish the distribution and intensity of agriculture irrigation and, with further interpretation, the magnitude of ground-water pumpage.

- The development of geochemical concepts and models that evaluate interactions between solutes in water and the minerals in aquifer material, and the use of stable isotopes to infer the origin and age of ground water.

- Providing information to Federal, State, and local agencies, for example:

  - The Bureau of Land Management Office, in Moab, Utah, used the water-level maps and areal extent maps of aquifers containing Mesozoic-age rocks in preparing a water-resources report for a water-resources management plan of the San Juan resources area. These maps were products of the Upper Colorado River Basin RASA study.

  - Ensource Oil Company in Denver used the information resulting from the Northern Great Plains RASA study for a study of occurrence of petroleum in the Williston Basin.

  - Two ground-water flow models were used by the Bureau of Reclamation in evaluating long-term (to year 2030) water-level declines for selecting the aqueduct alignment of the Central Arizona Project as related to potential land subsidence.

  - The pumpage data compiled by the Atlantic Coastal Plain RASA study were used by the Maryland Water Resources Administration to guide issuing of ground-water appropriations in the Maryland Coastal Plain.

  - The information on salty ground water resulting from the Atlantic Coastal Plain RASA study was used by the North Carolina Department of Natural Resources and Community Development to guide the North Carolina ground-water protection strategy mandated by the U.S. Environmental Protection Agency.

More than 300 reports, hydrologic investigations atlases, and scientific journal articles have been released under the RASA Program. Examples of recent reports are:

- "Regional Aquifer-Systems Analysis Program of the U.S. Geological Survey--Summary of Projects, 1978-1984," summarizes results of investigations and research, and lists publications since the program began in FY 1978

- "Geochemistry of Ground Water in the Sacramento Valley, California"

- "Hydrogeologic Framework of the Floridan Aquifer System in Florida and in Parts of Georgia, South Carolina, and Alabama"
- "The Effect of Eustatic Sea-Level Changes on Saltwater-Freshwater Relations in the Northern Atlantic Coastal Plain"
- "Geohydrology of the High Plains Aquifer in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming"
- "Mapping irrigated cropland from LANDSAT data for determination of water use from the High Plains Aquifer in parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming"
- "Ground-water flow in the Central Valley, California"
- "Geohydrology of bedrock aquifers in the Northern Great Plains in parts of Montana, North Dakota, South Dakota, and Wyoming"
- "Hydrogeologic framework of the Floridan Aquifer system in Florida and in parts of Georgia, South Carolina, and Alabama"
- "Hydrogeology and simulated effects of ground-water development of the Floridan Aquifer System, southwest Georgia, northwest Florida, and southernmost Alabama"
- "Hydrogeologic framework of the New Jersey Coastal Plain"
- "Hydrogeologic framework of the Virginia Coastal Plain"
- "The occurrence and geochemistry of salty ground water in the Northern Atlantic Coastal Plain"
- "Ground-water hydrology and simulated effects of development in Smith Creek Valley, a hydrologically closed basin in Lander County, Nevada"

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	14,184	12,184	-2,000
(FTE-T)	(160)	(160)	(--)

Postpone indefinitely the planned start of two Phase I regional aquifer system studies in the Appalachian Valleys/Piedmont and the Northern Rockies Intermontane Basin. Suspend the Phase I study of the Ohio-Indiana Carbonates and Glacial Valleys Aquifer System. Begin Phase II studies for Atlantic Coastal Plain and Central Midwest at a lower level of effort.

Distribution of change by object class:

The object class detail for the proposed $2,000,000 decrease is as follows:

	Amount
Travel and Transportation of Persons -	$ 74,000
Transportation of Things -------------	68,000
Communications, Utilities, and Misc. Charges ---------------------	206,000
Printing and Reproduction ------------	55,000
Other Services -----------------------	950,000
Supplies and Materials ---------------	322,000
Equipment ----------------------------	325,000
Total -----------------------	$ -2,000,000

Core Program Hydrologic Research

Objective: To improve knowledge of the fundamental processes that affect or control the movement of water, sediment, and chemical constituents through hydrologic systems so that appropriate methodologies can be developed to predict how natural or man-induced stresses may alter the hydrologic system, and apply these methodologies to solve critical water problems.

Base Program: Basic and problem-oriented research is conducted in support of the mission of the Geological Survey and is an integral part of all program elements. Through the years, many of the Geological Survey's major initiatives that are directed toward identifying and defining the extent of existing and emerging national water resources problems had their origins in the Core Research Program. The hydrologic information provided by the USGS is relevant today in assisting the Nation to resolve its many serious water resources problems, because the conscious decision was made in years past to invest in research for the future. The Core Research Program is designed to encourage pursuit of a diverse agenda of research topics aimed at providing new knowledge and insights into varied and complex hydrologic phenomena, processes, and systems that are not well understood and defined. The net emphasis of these research activities changes through time, reflecting the emergence of promising new areas of inquiry and the demand for new diagnostic tools and techniques with which to address water resources issues and problems. Knowledge gained and methodologies developed in this program have high transfer value to all operational aspects of the hydrologic investigations of the USGS and the water-oriented investigations and operations of other agencies. Examples of current research directed toward developing and refining methodology and gaining insight into hydrologic processes to better execute water-resources investigations and other water-related programs include:

- Definition of the basic characteristics of ground- and surface-water systems.

- Development of network design technology to assess length of record required to define various water-related statistical parameters.

- Development of the understanding of the impact of hydrologic phenomena on vegetative systems, such as tree rings and their isotopic composition, to extend historical hydrologic data for predictive purposes.

- Understanding of ecological changes in response to changes in the hydrologic regime.

- Development of increased capability to describe movement of solutes, heat, gases, sediment, and biota in surface-water systems.

- Definition of relations between physical, chemical, and biological factors in estuarine systems with increased emphasis on interdisciplinary research leading to better understanding of complex factors affecting hydrology of estuaries.

- Development of improved methodology to measure and predict the movement and expected hydrologic impact of glaciers, with increased emphasis on understanding hydrologic processes associated with glaciers and ice packs and the role of these in the hydrologic cycle.

- Continuing study of geologic and hydrologic evidence for significant atmospheric CO_2 variations in the geologic past, the inter-relation of these variations on hydrologic cycle fluctuations, and the implications for future interactions.

- Investigations in the areas of ground-water contamination, ground-water hydraulics, ground-water modeling, and soil studies. For these investigations, the USGS uses the support of research talent available in the academic community.

- Role of sediments, not only for the obvious physical implications of erosion and deposition, but also regarding the complex inter-relationship of the surface chemistry of sediments and implications on water quality.

- Investigations regarding rainfall-runoff relationships, flow routing, and flood frequency research.

The program encompasses the following major research disciplines:

Water Chemistry
Geochemistry
Ground Water Hydrology
Surface Water Hydrology
Geomorphology and Sediment Transport
Ecology

Examples of recent accomplishments:

- Studies involving the microscopic examination of the wood anatomy of ash trees collected from the flood plain of the Potomac River have shown changes in wood-growth associated with periods of above average summer flows of the river. The results of these studies are anticipated to have applications in streamflow-reconstructions where hydrologic data are incomplete or lacking, and thus be useful to land-use planners and others.

- Results of glaciology studies were recently published in the report, "Columbia Glacier in 1984: Disintegration Underway" (USGS Open-File

Report 85-81). As predicted in 1980, the Glacier in Alaska is disintegrating and retreating rapidly. Iceberg discharge averaged 14 million cubic meters per day during the summer of 1984, four times larger than the daily rate of calving that was measured in the summer of 1978.

- The ability to measure the quantity of water retained in mountain snowpacks is essential to flood-hazard and water-supply analysis in many areas of the Nation. Satellite-based passive microwave detection techniques are used in investigations of sea ice dynamics. Intensive real-time and retrospective studies, in conjunction with the National Aeronautics and Space Administration, are presently underway aimed at applying this technology to snowpacks in the Upper Colorado River Basin.

- San Francisco Bay and the Potomac estuary are strongly influenced by man's activities, including water diversion and waste discharge. Interdisciplinary research teams are continuing to study the physical, chemical, and biological properties of the water and sediment and their interdependence in estuaries. An example of process understanding comes from recent studies in south San Francisco Bay which have shown that vertical density (salinity) stratification can be predicted using readily available hydrologic measurements--river discharge and tidal current speed. Because periods of phytoplankton blooms relate to periods of water column stratification, this predictive capability can be a valuable tool in the management of estuarine resources.

- Studies of the occurrence of iron and manganese coatings on aquatic sediment particles were started within the USGS core research program during the 1960's. The importance of these coatings as scavengers of heavy metals and radionuclides was established, and the results of these investigations have led to widespread study of these oxide coatings by mineral exploration geochemists and environmental monitoring specialists interested in the fate of metals in the hydrosphere. Recent USGS studies have demonstrated the nature of bonding of iron oxide to quartz and clay particles, and phosphate to the iron oxide. Such information should prove to be of value in assessing the processes controlling the flux of nutrients and other pollutants between water and contacting solids.

- Past research prompted some of the early development of mathematical flow models capable of describing the response of an aquifer system to a wide range of hydraulic stresses. Consideration of chemical reactions (transport equations) was later coupled with flow equations and used to predict the movement of ground-water contaminants. Such models are currently being widely used in hazardous and radioactive-waste programs within and outside the USGS. Research leading to greater process understanding coupled with model enhancement is still a major endeavor.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Research Studies or Projects underway	38	39	39	38

Average unit costs for program outputs for FY 1987 Estimate:

Research Studies or Projects underway -- 38 @ $195,000

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	8,109	7,408	-701
(FTE-T)	(207)	(207)	(--)

The decrease in funding will terminate the dedicated funding to the Oregon Graduate Center for ground-water research activities carried out under the Core Program Hydrologic Research.

Distribution of change by object class:

The object class detail for the proposed $701,000 decrease is as follows:

	Amount
Other Services (Total) ---------------	$ -701,000

Improved Instrumentation

Objective: To improve the technology, methodology, and instrumentation for collecting hydrologic data in the most timely and cost-effective manner possible.

Base Program: Modern technologies have greatly increased the Geological Survey's capability to conduct hydrologic investigations. Computers, communications satellites, automated radios, various other electronic devices--some unique to thr science of hydrology--are being developed to sense, sample, record, and communicate large quantities of water-resources information. The program is designed to apply these technologies to more fully automate and modernize the Geological Survey's hydrologic data collection activity.

The three major activities of the current program are:

1. ENHANCEMENT AND APPLICATION OF REAL-TIME HYDROLOGIC DATA COLLECTION

   The goal of this effort is to improve the reliability of the data collection program and reduce the number of field visits necessary for operation of the hydrologic data-collection stations. In recent years, on a reimbursable basis from other Federal, State, and local agencies, the Geological Survey has cooperated in installing satellite telemetry equipment at USGS hydrologic stations, which use the Geostationary Operational Environmental Satellites (GOES). Satellite telemetry receive stations have been installed at nine USGS District Offices. In FY 1985, the satellite telemetry receive stations were integrated with the Distributed Information System (DIS) computer network, allowing USGS offices to access the Survey-operated GOES receive stations from any computer connected into the DIS. This results in greatly increased responsiveness to user needs for hydrologic information. By FY 1987, the network of real-time hydrologic stations is expected to reach approximately 2,000. Ultimately a large majority of the Survey's hydrologic stations will be capable of telemetering data via satellite. This capability is being driven by the need for real-time hydrologic data by cooperating agencies, such as flood forecasting by the National Weather Service and water management by the U.S. Army Corps of Engineers, and the cost-effectiveness of being able to monitor hydrologic stations remotely. As many as 6,000 of the Survey's continuously recording stations may eventually be so equipped.

2. DEVELOPMENT OF NEW HYDROLOGIC FIELD DATA AND ACQUISITION SYSTEM

In FY 1982, the USGS began work on development of a new field data collection system known as "Adaptable Hydrologic Data System" (AHDAS), and awarded a contract in FY 1984 to initiate the hardware design and fabrication. AHDAS consists of a core unit designed to supply the power and programming to operate all the sensors at a station and to record and telemeter data. In FY 1986, delivery of 20 prototype AHDAS units is expected from the contractor. Field and laboratory testing will then be undertaken, and preparations will be made for procurement of the first group of units. In FY 1987, based upon the results of field and laboratory testing, the USGS will complete the technical documentation necessary for additional procurements of AHDAS units. The new hydrologic field data acquisition system will be an electronically-based and integrated system that will replace a wide variety of outdated electronic and electromechanical subsystems presently in operation. Concurrently, investigations are being conducted into expanding the capability of such a system with new hydrologic measurement technologies.

3. HYDROLOGIC INSTRUMENTATION RESEARCH AND DEVELOPMENT

The USGS, through its Hydrologic Instrumentation Facility at Bay St. Louis, Mississippi, is working to improve hydrologic instruments for use in data-collection activities. Activities in FY 1986 and FY 1987 include research and development for other measurement technologies and instruments. Research will be oriented toward acid rain, water use, and other ongoing water resources investigations programs; for example, developing and testing pumps and samplers for toxic waste programs where there is a need for manual sampling technologies to complement the automated sampling capabilities being developed for AHDAS.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Sensor Research and Development Projects	5	6	6	3
Real-Time (GOES Satellite) Hydrologic Data Collection Stations*	1,519	1,800	2,000	2,000
Satellite Telemetry Receive Stations	8	9	9	9
Prototype AHDAS Units Delivered	--	20	--	--

* Indicates number of USGS hydrologic stations equipped with GOES telemetry, even though many of the stations have telemetry installed and operated on a repay basis by the USGS for a cooperating agency.

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	1,984	1,677	-307
(FTE-T)	(7)	(7)	(--)

The decrease in funding will result in the following changes in the program activities: termination of several projects involved in examining the cost-effectiveness of employing satellite technology in the operation of hydrologic data networks; reduction of software development efforts associated with the collection, management, and analysis of real-time data; reduction in testing and evaluating a variety of hydrologic instrumentation; reduction in some research projects involved in development of new hydrologic instrumentation and sensors.

Distribution of change by object class:

The object class detail for the proposed $307,000 decrease is as follows:

	Amount
Travel and Transportation of Persons -	$ 27,000
Transportation of Things -------------	44,000
Communications, Utilities, and Misc. Charges ----------------------	32,000
Printing and Reproduction ------------	8,000
Other Services -----------------------	66,000
Supplies and Materials ---------------	49,000
Equipment ----------------------------	81,000
Total ------------------------	$ -307,000

Water Resources Assessment

Objective: To provide Congress; Federal, State, and local officials; resource managers; and the general public information about changes and trends in the availability, quality, and use of water resources in formats that facilitate the analysis and development of water policies, legislation, and management actions. Specific objectives include: (1) describing the geographic extent and magnitude of water issues; (2) developing and maintaining maps and national summary statistics that support the quantification of water issues and the description of water conditions; (3) improving methods to evaluate and characterize the effects of land and water uses on the distribution and availability of water resources; and (4) preparing an annual National Water Summary, thematic maps, and other reports that portray the challenges and opportunities associated with managing water resources.

Base Program: The importance of periodic analyses of the Nation's water conditions and the identification of water issues have long been recognized as a point of departure in evaluating the effectiveness of water programs and formulating water policies. As a result, the Geological Survey established the Water Resources Assessment program in FY 1981 to assemble and synthesize existing information about water availability, quality, and use; trends in conditions; and the nature of water issues. Other USGS programs, such as the Data Collection and Analysis, Regional Aquifer System Analysis, Hazardous Substances Hydrology, and Federal-State Cooperative Programs, provide much of the data, analyses, and research results for synthesis and display in the annual National Water Summary reports.

The program has three elements: (1) issue identification and analysis to provide insight into the nature, distribution, magnitude, and trends of the Nation's water issues; (2) analysis of water resources conditions and presentation of the results in an annual National Water Summary, thematic maps, and related technical reports; and (3) computer storage of summary statistics and map data describing water conditions for use in preparing the National Water Summary. The 1983 National Water Summary identified a number of significant water issues that will be discussed in future National Water Summary reports; for example, salinity and sediment transport patterns in the Nation's river basins; the distribution of nitrate in ground water; the quality of lakes and reservoirs; and the effects of mine drainage on water resources. Although no new data will be gathered as part of these studies, considerable effort will be made to assemble existing information from various sources.

In FY 1985, program activities included:

- Publication of the 1984 National Water Summary, which includes a State-by-State description of ground-water resources.

- Preparation of the 1985 National Water Summary, which will include a State-by-State description of surface-water resources.

- Planning the 1986 National Water Summary.

- Compilation of data on annual water imports and exports for major river basin systems in the East.

- Publication of a map entitled, "Surface Water and Related Land Resources Development in the United States and Puerto Rico."

In FY 1986, activities will include:

- Publishing the 1985 National Water Summary.
- Preparing the 1986 National Water Summary.
- Planning the 1987 National Water Summary.
- Compiling water-quality information for assessing the condition of lakes and reservoirs.
- Compiling surface-water statistics for use in identifying river basins where water demands exceed annual renewable water supplies.
- Identifying areas where substantial changes have occurred in ground-water storage and in the estimated rate of ground-water withdrawals.
- Analyzing the causes of water use patterns and trends.

In FY 1987, the program activities will include:

- Publishing the 1986 National Water Summary.
- Preparing the 1987 National Water Summary.
- Planning the 1988 National Water Summary.
- Publishing a description of sediment-transport patterns in major rivers of the United States.
- Publishing a runoff map of the United States.

The results of these analyses and those of other USGS water programs will be available for use in preparing future National Water Summaries and for use by other agencies and organizations and by the public.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
National Water Summary Report	1	1	1	1
Data Compilation Projects	2	2	2	2
Analytical Studies	5	6	6	6
Research Studies	2	1	1	1

Average unit costs for program outputs for FY 1987 Estimate:

National Water Summary ------------------------------ 1 @ $600,000
Data Compilation Projects --------------------------- 2 @ $ 50,000
Analytical Studies ---------------------------------- 6 @ $ 60,000
Research Projects ----------------------------------- 1 @ $ 80,000

Toxic Substances Hydrology--Surface- and Ground-Water Contamination

Objective: The interdisciplinary Toxic Substances Hydrology program is designed to provide the Nation with earth-sciences information needed to improve waste-disposal practices and to help mitigate existing and future surface- and ground-water contamination problems by: (1) developing new and refining existing methods to sample and measure hazardous substances in ground and surface waters, aquifer and sediment materials, and biota; and (2) acquiring a greater understanding of the biological, physical, geological, and chemical processes and factors that affect the movement and fate of hazardous substances in ground- and surface-water systems. This information is necessary to appraise the occurrence, movement, and fate of hazardous substances in the Nation's ground and surface waters and sediments and determine how these are changing with time.

Contamination of the Nation's ground and surface waters by toxic wastes is considered by many to be one of the most significant environmental issues of the decade. Billions of gallons of contaminated liquids are discharged into the environment each year and virtually all States have ground- and surface-water problems resulting from toxic organic chemicals or heavy metals. Problems such as those encountered at Love Canal, New York, have focused public attention on the extensive social and economic impact that can result from even a relatively small area of ground-water contamination. Awareness of the seriousness of surface-water and sediment contamination by hazardous substances has increased dramatically in recent years. Incidents such as dioxins at Times Beach, Missouri; kepone in the lower James River, Virginia; and PCBs in the Hudson River sediment and water have received widespread attention by Federal, State, and local agencies and the general public. Successful implementation of the laws and regulations to reduce environmental degradation from toxic waste contamination requires earth-sciences information. The Toxic Substances Hydrology program provides an important role in identifying the extent of these problems. Significant research and technology development will help to guide management decisions related to hazardous waste.

Base Program: The Geological Survey Toxic Substances Hydrology Program focuses on the development of new knowledge and insight regarding the occurrence, movement, and fate of toxic contamination in both ground and surface water. The program is structured to enable: (a) the pursuit of a broad range of fundamental process-oriented research and methods development efforts related to contamination in both surface and subsurface hydrologic systems; (b) the conduct of intensive, interdisciplinary field research of specific surface and ground waters contaminated by selected types of chemicals; (c) the improvement of methods for the collection, analysis, and interpretation of hydrochemical information at regional scales to determine the extent and magnitude of contamination. The three major components of the program are: Process-Oriented Research and Methods Development; Focused Field Investigations and Research; and Supportive Regional Investigations. These programs are being closely coordinated with EPA through the EPA/USGS Coordinating Committee.

PROCESS-ORIENTED RESEARCH AND METHODS DEVELOPMENT

The USGS is developing relevant fundamental principles, general understanding, and scientifically-based methodologies to describe the occurrence, movement, and fate of contaminants in surface- and ground-water systems.

This program component includes research in the following topical areas:

a. Ground-water hydrology--To provide a quantitative understanding of the flow of water and the transport of its constituents through the subsurface. New mathematical methods are being developed to better explain the mechanisms by which contaminants mix with ground water or are transported through rock fractures, and how gaseous or non-water phase fluids move through the ground.

b. Erosion and sediment transport--A large part of toxic substances which occur in rivers are attached to, and transported by, sediment. Conceptual and mathematical models are being adapted or developed to describe the cycle of detachment, movement, and deposition of sediments in river basins.

c. Inorganic and organic geochemistry--The movement of inorganic and organic contaminants may be affected by a variety of reversible or irreversible chemical reactions such as ion exchange, mineral solution or precipitation, ion filtration, absorption/desorption, oxidation/reduction, complexation, and degassing. Research is being conducted to characterize the trace inorganic and organic species occurring in surface and ground water; and the pathways, rates, and controlling factors of reactions of important trace contaminants in solution and at the solid/water surface.

d. Ecology--To provide an understanding of how living organisms accumulate and alter inorganic and organic trace substances. One need is definition of the quantitative relations between the concentrations of toxic substances in water and sediment and the concentrations in aquatic biota.

e. Methods development--Major research and development is required to improve methods for sample collection, sample preparation, and analysis for toxic substances. Efforts are being directed toward developing better techniques to obtain representative samples of ground water contaminated by organic chemicals; improving methods for extracting both metals and organic chemicals from solids; and improving the ability to detect and quantify substances present at extremely low concentrations.

In FY 1986 plans are to expand research on processes involved in distributing hazardous substances between water, sediment, and biota; on chemical and biochemical transformation pathways; and on the detachment, transport, and deposition of fine-grained sediment containing hazardous substances.

FOCUSED FIELD INVESTIGATIONS AND RESEARCH

The field investigations combine applied and basic research and provide sites where the process-oriented and methods development work described above can be used to study the fate and transport of important types of organic and inorganic contaminants in ground- and surface-water systems. The studies allow for the development of new study approaches which can be applied to subsequent studies conducted in the Federal-State Cooperative Program or in other Federally-funded programs.

a. Ground water--The ground-water intensive interdisciplinary field investigations are designed to: (1) demonstrate the application of theoretical and analytical methods in real-world situations; (2) improve field and laboratory methodology, sampling, and "exploration" procedures utilizing innovative geochemical and geophysical techniques; (3) use scientific findings, develop innovative techniques to neutralize, immobilize, or remove contaminated ground water; (4) assess the overall reliability and value of predictive models for ground-water pollution; and (5) evaluate operational and continuing data collection strategies for ground-water quality restoration programs.

   In FY 1985 and FY 1986, ground-water contamination studies are being conducted at seven sites. Activities will continue at six of these sites in FY 1987:

   1. Bemidji, Minnesota (started in FY 1983): Crude oil has contaminated a shallow aquifer. The crude oil is currently found to be floating on the water table, coating aquifer material and dissolved in ground water. Under study are the processes affecting how crude oil and its derivatives are being transported through the subsurface.

   2. Cape Cod, Massachusetts (started in FY 1983): Sewage and chlorinated hydrocarbons are contaminating a shallow, sandy aquifer. The process by which the sewage mixes with ground water is of major theoretical and practical concern; understanding this process will help in developing more accurate ground-water models.

   3. Pensacola, Florida (started in FY 1983): Creosote and pentachlorophenol have impacted a shallow ground-water system as well as a stream and bay. Microbiological degradation of phenol is occurring as are other processes. Understanding in-situ microbiological degradation is necessary to predict the ultimate fate of organics in ground water.

   4. Tar Creek, Oklahoma (started in FY 1983): Trace metals are contaminating an abandoned mine and stream system. Metals are precipitating from solution. The geochemmical and microbiological processes of dissolution and precipitation are being studied to characterize the extent to which metals will be transported. Remedial action by EPA in the vicinity of the site has limited its research value. Therefore, site activities will be ended in FY 1986, and final reports completed by FY 1987.

   5. Picatinny Arsenal, Morris County, New Jersey (started in FY 1985): Trichloroethylene (TCE) is a major contaminant in the Nation. It can be found dissolved in ground water and as a gas in the unsaturated zone. The processes affecting transport in water and in the gaseous phase are being studied to predict the fate of TCE and recommend clean-up procedures.

6. Yakima Valley area, Washington (started in FY 1985): Gasoline is a major ground-water contaminant and the subject of new Federal regulations. Gasoline can move as a dissolved constituent in ground water, as a gas, or degrade to daughter compounds. The role of physical, chemical, and microbiological processes affecting the fate and transport of gasoline in the subsurface will lead to a better understanding of how to mitigate the widespread contamination of ground water by this product.

7. Miami Wash - Pinal Creek, Arizona (started in FY 1985): An acid plume of contaminated ground water is moving through a shallow alluvial aquifer downstream from a copper-mining area. The plume has pH values of 2 to 3 and contains high concentrations of dissolved metals which may precipitate from solution. The study will study the types and rates of chemical reactions that alter the chemistry of the plume, and develop numerical methods to simulate the flow of ground water and its interaction with surface waters, and the transport of metals through the ground-water system.

b. Surface water--A series of detailed field investigations, each of 3 to 4 years duration, are being conducted in selected river basins. The purpose of these investigations is to: (1) determine the occurrence, distribution, and movement of organic substances and trace metals in river systems under different settings; (2) improve knowledge of the processes and factors which govern the movement and fate of different classes of toxic substances in different hydrologic settings; and (3) develop improved study approaches and sampling methods for evaluating the magnitude, distribution, and movement of toxic substances in water, sediment, and biota.

Two intensive RBIs were begun in FY 1985, and one will begin in FY 1986:

1. Calcasieu River in Louisiana: The problem in the Calcasieu River is contamination by organic chemicals. Land use along the lower river is primarily urban and industrial; petrochemical plants use the river for water supply and effluent discharge.

2. Whitewood Creek and Belle Fourche River System in South Dakota: The water-quality problem being investigated in this system is associated with many years of gold mining in the Black Hills and the discharge of mine wastes from these operations into Whitewood Creek.

3. Upper Arkansas River Basin in Colorado. Investigations will focus on effects of mine drainage. Water flowing through abandoned tailings and from mine drains in the Leadville, Colorado, area contributes large amounts of cadmium, copper, iron, lead, manganese, nickel, and zinc to the Arkansas River.

SUPPORTIVE REGIONAL INVESTIGATIONS

The present quality of the Nation's ground water is being investigated through studies in a number of representative areas. In each of these areas, existing data on aquifer characteristics, ground-water flow patterns, ground-water quality, and land use are assembled, and pertinent new data are collected. These studies are performed primarily by personnel in the Geological Survey's District Offices who are most familiar with aquifers in their area, thereby capitalizing on the information and understanding that already exists. The goal of these studies is to develop procedures which can be used to associate ground-water quality with land-use practices for several representative hydrogeologic and climatic settings. The information thus developed will serve to guide further evaluations of ground-water quality nationwide. Also included in these analyses are some preliminary evaluations of the vulnerability of aquifers to contamination in the near and long term.

In FY 1985, the reconnaissance phase of the 14 assessments of ground-water quality in major geohydrologic regions of the Nation were completed, and 6 to 8 of the 14 areas are being selected for more intensive studies in FY 1986 and FY 1987.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Process-Oriented Research and Methods Development				
Projects/Studies Underway	45	49	49	49
Focused Field Research				
Ground-Water Contamination Site Investigations	7	7	6	6
Surface-Water and Sediment Contamination River Basin Investigations	2	3	3	3
Supportive Regional Investigations and Appraisals				
Regional Ground-Water Quality Appraisals				
--Reconnaissance Phase Studies	14	--	--	--
--Intensive/Comprehensive Studies	--	6-8	6-8	6-8

Average unit costs for FY 1987 Estimate:

Process-Oriented Research and
Methods Development Projects/Studies ------------------------ 49 @ $135,000

Focused Field Research
Ground-water Contamination Investigations ----------------- 6 @ $500,000
Surface-Water/Sediment RBI -------------------------------- 3 @ $250,000

Regional Ground-Water Quality Appraisals ---- 6 to 8 @ $200,000 to $250,000

Some recent research findings of the Toxic Substances Hydrology--Ground Water-Contamination component are as follows:

- A sensor has been designed to determine whether granular porous media is saturated with organic fluids, soil gas, or water. The sensor is being field tested at the Bemidji, Minnesota research site and should prove useful in determining the fate of crude oil and its derivatives in contaminated ground water.

- Patterns of regional ground-water contamination correlate reasonably well with different land uses. Such information will assist in understanding the extent to which ground water may be contaminated.

- Preliminary results from regional ground-water quality studies document that ground water underlying certain suburban land contains a variety of organic contaminants, such as trichloroethylene and pesticides, which are commonly associated with industrial and agricultural land uses.

- A gas chromatographic method was developed and evaluated to measure triazine herbicides in natural water samples. Triazine herbicides are the major group of herbicides used to increase agricultural production and have been found in ground waters underlying agricultural areas. This approach offers the advantages of efficiency, compound selectivity, portability, and speed over previously available methods.

- Remote sensing techniques, for example ground-penetrating radar and complex resistivity, have been developed to map the geometry of toxic waste plumes in the subsurface and zones within these plumes where chemical reactions may be occurring. Such zones have been defined using these techniques at intensive field research sites in Bemidji, Minnesota, Cape Cod, Massachusetts, and Pensacola, Florida.

- Natural microbiological activity may significantly degrade selected, man-made organics in contaminated ground water. This may occur within several hundred feet of the contaminant source.

- Ground water contaminant plumes have been found to consist of distinct "reaction zones." These zones may have very limited vertical and horizontal extent but may significantly alter the contaminant composition.

- Field testing of a variety of sampling methods has demonstrated that the concentration of organic contaminants in the sampled water may vary widely as a result of pumpage rate or duration. It is important to overcome such sampling problems to properly interpret ground-water quality data.

- The regional effects of injection of liquid waste into the subsurface was digitally modeled as part of a research project in Florida. Such models provide information about time of travel of the injected waste through the subsurface. This information is of value in determining the effect of subsurface injection of wastes on the ground-water resources in a region.

- Research has indicated that removal of oxygen from ground water as a result of creosote/pentachlorophenol contamination may be responsible for the alteration of the natural clay minerals in an aquifer. Such alteration can affect the rate of movements of contaminants through the subsurface.

- A computerized analytical technique was developed to measure selected volatile organic priority pollutants. This method is particularly useful for samples of natural water and drinking water.

- A simulation-management methodology has been developed for the rehabilitation of aquifers that have been subjected to chemical contamination. The model is capable of determining well locations and pumping and injection rates for ground-water quality control. Such methods should help to determine optimal designs for reclaiming contaminated ground water.

Nuclear Waste Hydrology

Objective: To determine the hydrologic and geologic conditions important for the shallow burial and containment of low-level radioactive wastes, and to support the national effort to select and characterize sites where high-level radioactive wastes can be effectively isolated in deep geologic environments. Specific objectives are to provide techniques and methodology for: (a) evaluating the chemical interaction of nuclear waste with natural fluids and with the rock and mineral framework of the ground-water systems; (b) evaluating transport of waste nuclides by ground water; and (c) evaluating and reviewing geologic and hydrologic conditions at a site after selection by the Department of Energy. (Nuclear Regulatory Commission evaluation will be made to see if a proposed site for a high-level waste repository conforms to criteria adopted for licensing the facility.) The objective of activities with regard to low-level nuclear waste is to develop hydrogeologic information for use in selecting future sites for burial of these wastes, and to aid in monitoring and managing existing disposal sites. These USGS efforts support the Low-Level Radioactive Waste Policy Act of October 1980.

Base Program:

Low-level Nuclear Waste Investigations - Research and investigations are being conducted to develop a better understanding of the earth science factors related to the effective disposal of low-level radioactive waste. Three of six commercial low-level radioactive waste disposal sites (Maxey Flats, Kentucky; West Valley, New York; and Sheffield, Illinois) have been closed in recent years because of questions raised regarding their hydrogeologic characteristics as well as other concerns. The Environmental Protection Agency, Nuclear Regulatory Commission, and Department of Energy, as well as State agencies are actively developing technical criteria, standards, regulations, and plans for low-level waste management. Those agencies rely on the USGS for appropriate hydrogeologic information and advice upon which to base their rules, site selection criteria, etc. Therefore, all major elements of this program are closely related and coordinated with those agencies. The Low-Level Radioactive Waste Policy Act requires the Department of Energy to develop a national waste management program, with technical assistance from the Geological Survey, aimed at assisting States to select and develop additional and better low-level waste sites. Reports and input from the current USGS program have provided much of the technical basis for Nuclear Regulatory Commission rules, for Department of Energy site selection guidelines, and for forthcoming Environmental Protection Agency standards.

The field program is focused on field investigations of three commercial disposal sites (Sheffield, Illinois; Barnwell, South Carolina; and Beatty, Nevada) and one Department of Energy site (Argonne, Illinois). The first 4-year phase of these investigations was completed in FY 1980. That phase also included investigations at sites near West Valley, New York, and Maxey Flats, Kentucky. These are pioneering studies involving new and innovative technology to assess processes and parameters controlling nuclide migration in ground water. Initial investigations identified several technical areas needing more intensive study to acquire the necessary quantitative understanding of hydrogeologic principles related to radioactive waste disposal. Therefore, the field investigations are supported by research into chemical and physical mechanisms which control subsurface leaching and migration of radionuclides; better methods of modeling these mechanisms; and the development of techniques for sampling and measuring physical and chemical parameters in the field. Geohydrologic guidelines for disposal site selection and operation will be refined as better information is developed from these advanced field and laboratory studies. Many of the results from this research will have important and broad applications to another critical national problem--the disposal of hazardous wastes other than radioactive.

Comprehensive reports on the hydrogeology of the commercial disposal sites at Maxey Flats, Kentucky and Barnwell, South Carolina, were published in FY 1983. Similar reports on the sites at West Valley, New York and Sheffield, Illinois were available in 1984; a report on Beatty, Nevada was published in January 1986. The focus of the program now is to achieve a better understanding of specific hydrogeologic problems related to radioactive waste disposal. This objective is being accomplished by scaling back work at Maxey Flats and West Valley to concentrate resources at the arid Beatty site and the humid site at Sheffield. A principal process currently under study is radionuclide transport in the unsaturated zone, both in the liquid and gas phases.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Research and Investigative Projects Underway	19	19	16	16

Average unit costs for program outputs for FY 1987 Estimate: 16 @ $164,000.

High-Level Nuclear Waste Investigations - After more than 30 years of nuclear power development, a suitable permanent repository has yet to be developed for the safe disposal of high-level radioactive waste. In addition to being highly radioactive, the wastes generate considerable heat. The disposal method, mandated by Congress in the Nuclear Waste Policy Act of 1982, for the first two repositories consists of emplacing the waste form in deep mined facilities where the hydrogeologic environment would effectively isolate the waste from the biosphere for tens of thousands of years. The earth science problems associated with this endeavor are complex. The Geological Survey's High-Level Waste Investigations Program stresses the concept of isolating nuclear wastes by means of relatively independent multiple barriers to waste nuclide migration. The designed redundancy of this concept is planned to overcome uncertainties in engineering and in man's ability to adequately characterize the rocks and the hydrologic environment comprising the repository and to accurately predict waste-rock reactions; natural geologic events, such as regional tectonics, volcanism, glaciation; and the extent and rate of nuclide transport. A major requirement is the identification of environments where such multiple natural barriers are thought to exist. A second major requirement is the identification and understanding of the critical hydrogeological properties and processes which are involved in radionuclide migration from a repository to the biosphere.

The five major elements or tasks in the Geological Survey's High-Level Waste Program are: (1) identification of environments with effective multiple barriers to radionuclide transport; (2) characterization of media comprising specific environments; (3) development of techniques and methods for characterizing environments; (4) investigation and modeling of processes related to radionuclide migration; and (5) synthesizing information from the other program elements to develop predictive radionuclide transport models for site evaluation. The Geological Survey's High-Level Waste Investigations Program supports the Federal Government's "Civilian Radioactive Waste Management Program." All the major elements of the program are related to the ongoing activities of other agencies (Department of Energy, Nuclear Regulatory Commission, Environmental Protection Agency) to identify an acceptable site for a geologic repository in the near future. The tasks outlined above will have direct application to the site selection and licensing process as mandated in the Nuclear Waste Policy Act of 1982.

This program began in FY 1979 and addresses the above mentioned five major elements or tasks, including coordination of program needs and efforts with other governmental agencies' programs. A cooperative planning effort with the Department of Energy resulted in a jointly authored report on an earth science technical plan for disposal of radioactive waste in a mined repository. It describes a research program to resolve earth science problems associated with developing such a repository. Regularly scheduled meetings with the Department of Energy and ad-hoc meetings with other Federal agencies assure continued coordination of plans and compatability of activities.

The Geological Survey's program complements that of the Department of Energy by providing additional independent research on the identification of suitable environments and host media for waste disposal. In contrast with other agencies' programs, the USGS program focuses on longer term geologic and hydrologic problems associated with the development of waste repositories over the next few decades.

In support of the national program mandated by the Nuclear Waste Policy Act of 1982, in FY 1985 and continuing in FY 1986 the Geological Survey's activities in the development and application of screening procedures for identifying potentially suitable environments for disposal sites will continue to focus on characterizing properties of potential repository environments in (a) thick unsaturated deposits of the western States, (b) shales and other clay-rich deposits of the mid-continent and eastern States, and (c) buried crystalline rocks of the eastern States. Field studies continue on the development of geophysical exploration methods, on in-situ subsurface testing techniques, and on the geochemical behavior of radionuclides in ground water (Task 4). The purpose of these studies is to determine lithologic and hydrologic properties (both under Task 3 above) of formations considered to be suitable for disposal of wastes. Emphasis is also being placed on developing better tools, methods, and models for quantitative understanding of ground-water flow and solute transport through fractured rock systems.

Selected program outputs are:

	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Research and Investigative Projects Underway	28	20	[illegible]	[illegible]

Average unit costs for program outputs for FY 1987 Estimate: [illegible]

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	7,303	3,203	-4,100
(FTE-T)	(78)	(57)	(-21)

The focus of the Nuclear Waste Program would be altered to concentrate principally on research and investigations associated with the disposal of low-level radioactive materials. A review and coordination function associated with the earth-science aspects of high-level radioactive waste disposal would be retained. Development of some techniques and methods for characterizing environments and investigations and modeling of processes related to radionuclide migration would continue. Work will continue on developing better tools, methods, and models for quantitative understanding of ground-water flow and solute transport through fractured rock systems. Most remaining USGS involvement with regard to high-level radioactive waste issues would be performed for other Federal agencies, such as the present collaborative program with the Department of Energy. Such an approach, which maintains significant USGS involvement with the Department of Energy in activities directed toward the characterization of the initial national high-level radioactive waste repository, is regarded as a sensible means of allocating limited budgetary resources.

Distribution of change by object class:

The object class detail for the proposed $4,100,000 decrease is as follows:

	FTE-T	Amount
Personnel Compensation	-21	$ [illegible]
Personnel Benefits		[illegible]
Travel and Transportation of Persons		[illegible]
Transportation of Things		[illegible]
Communications, Utilities, and Misc. Charges		[illegible]
Printing and Reproduction		[illegible]
Other Services		[illegible]
Supplies and Materials		[illegible]
Equipment		[illegible]
Land and Structures		6,000
Insurance Claims & Indemnities		3,000
Total		$ -4,100,000

Acid Rain

Objective: (1) To help measure the amount, character, and variability of atmospheric deposition nationwide; (2) to help determine the susceptibility of lakes and streams to acidification with emphasis on those areas in which soils and rocks have poor buffering capacity; (3) to measure water quality in a number of susceptible areas to ascertain long-term changes resulting from acid deposition; (4) to provide quality-assurance support for chemical analyses performed for the National Trends Network and other Federal and State deposition monitoring networks; (5) to determine the effects of acid deposition on water resources, soils, and near-surface rocks, in a variety of acid-sensitive areas; (6) to help predict, based upon the information gained, what effect either increased or decreased pollutants in rainfall will have on the characteristics of soils, rocks, and natural waters; and (7) to determine the mechanisms and rates of deterioration of common building stones by atmospheric deposition.

Base Program: The Geological Survey's Federal Acid Rain Program began in FY 1982 and is carried out as part of the National Acid Precipitation Assessment Program of the Interagency Task Force on Acid Precipitation. The USGS serves as a principal advisor to the Department of the Interior's representative on the Interagency Task Force on Acid Precipitation and uses that body plus other mechanisms to coordinate with Federal agencies outside the Department that are involved in studying certain aspects of acid precipitation. The USGS is the lead agency for the Task Group on Deposition Monitoring, one of ten task groups formed by the Interagency Task Force to coordinate and implement research on acid precipitation.

The three principal components of the USGS program are as follows:

1. MONITORING ATMOSPHERIC DEPOSITION

A major element of the Geological Survey's continuing responsibility, as lead agency for the Task Group on Deposition Monitoring, is coordination of the design, implementation, and operation of the interagency National Trends Network (NTN), a 150-station network for collecting data on atmospheric deposition in the United States. The NTN is operated in cooperation with other Federal, State, and local agencies and universities.

USGS activities include:

- Operation of about one-third of the 150-station NTN.

- Conduct of a pilot-scale program, begun in FY 1985, to determine concentrations of trace metals (lead, mercury, copper, cobalt, and cadmium) in wet deposition at 6 NTN stations.

- Providing support to other Deposition Monitoring Task Group agencies in setting up a pilot program of dry deposition measurement at selected NTN stations. In FY 1986, efforts will be undertaken to develop improved laboratory techniques and provide laboratory services for analyzing samples collected in air-concentration monitors in support of the dry deposition component of the NTN.

- Conduct of a laboratory quality-assurance program for the Geological Survey and other Federal and non-Federal agencies involved in monitoring acid deposition to define the precision and comparability of chemical analyses of atmospheric deposition samples.

2. MONITORING SENSITIVE LAKES AND STREAMS

This is part of a larger Federal interagency effort to determine the effects of acid deposition on sensitive lakes and streams throughout the United States. USGS activities are:

- Conduct of long-term data collection on the quality of water in 16 sensitive areas to provide water-quality data for evaluation of the effects of acid deposition on lakes, streams, and ground water. These areas have been identified as sensitive to acid deposition, and each is representative of a particular set of geologic, hydrologic, and meteorological conditions.

3. RESEARCH ACTIVITIES

The USGS acid rain research program is designed to acquire an understanding of the processes by which atmospheric deposition impacts hydrologic systems and building materials. Ongoing research activities in FY 1985, which are planned to continue in FY 1986 and FY 1987, are as follows:

- Conduct detailed investigations in 6 of the 16 sensitive areas in an effort to define the chemical interactions between atmospheric deposition, bedrock, soils, and surface and ground water.

- Continuation of a field research program at several locations in the eastern United States to assess the effects of acid deposition on building materials, which includes:
  - developing and testing an instrument for measuring progressive changes in the surface characteristics of building stones due to atmospheric exposure.
  - exposing selected samples of limestone and marble to atmospheric weathering to determine rates of deterioration.

Recent Accomplishments

- Published a report, "Design of the National Trends Network for Monitoring the Chemistry of Atmospheric Precipitation." The 150-station network is designed to be a rural network reflecting regional characteristics of precipitation chemistry without the localized effects of nearby sources of air pollution. Designation of data collection sites has taken into account regional variations in ecology, existing knowledge of atmospheric deposition patterns of acidifying substances, definition of areas believed to be sensitive to acidification, and the existence of data collection sites in other programs.

- Published a report on the results of the quality-assurance program for field measurements by deposition monitoring site operators entitled, "Precision of the Measurement of pH and Specific Conductance at National Atmospheric Deposition Program Monitoring Sites, October 1981 - November 1983." The report indicates that the precision of field pH and specific conductance measurements were within expected and acceptable limits during the 2-year period.

- Published a report, "Evidence for Acid-Precipitation-Induced Trends in Stream Chemistry at Hydrologic Bench-mark Stations." An analysis of data from the Geological Survey's Hydrologic Benchmark Network of sampling sites on small headwater streams largely unaffected by man has shown a decrease in sulfate and an increase in acid-neutralizing capacity in the Northeast and the opposite picture in the Southeast and West from the mid-1960's through 1981. These results suggest a decrease in precipitation acidity in the Northeast and increasing acidity in the rest of the Nation.

- Published a report, "An Evaluation of Trends in the Acidity of Precipitation and Related Acidification of Surface Water in North America." Conclusions based on the evaluation are that acidification of precipitation in the Northeast occurred primarily before the mid-1950's and has remained largely unchanged since the mid-1960's. In other parts of the country, where the picture is much less clear, the time and circumstances of initial acidification are unknown. Only in the northeastern United States has acidification of lakes and streams occurred in a time frame that is clearly compatible with the hypothesis that regional acidification of precipitation was the cause.

- Published a report, "Acid Precipitation--An Annotated Bibliography," covering major scientific literature on acid rain since the late 1800's.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
USGS-operated stations in the total Interagency National Trends Network of 150-stations	49	49	50	50
Research and investigative projects	7	7	7	6

Average unit costs for FY 1987 Estimate:

50 NTN stations @ $20,000; 6 research/investigative projects @ $300,000

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	3,150	2,850	-300
(FTE-T)	(36)	(36)	(--)

The decrease in funding will result in the following changes in activities: termination of pilot-scale program, which started in FY 1985, to determine concentrations of trace metals in wet deposition at six stations in the

National Trends Network; termination of efforts to develop a precipitation sampler suitable for the year-round collection and preservation of samples for analysis of trace metals, nutrients, and organic compounds in atmospheric deposition; reduce from 16 to 12 the number of sensitive lakes and streams that are monitored to detect effects of atmospheric deposition on sensitive water bodies; reduce support to the Interagency Task Force to develop improved laboratory techniques and provide laboratory services for analyzing samples collected in air-concentration monitors in support of the dry deposition component of the National Trends Network.

Distribution of change by object class:

The object class detail for the proposed $300,000 decrease is as follows:

	Amount
Travel and Transportation of Persons -	$ 11,000
Transportation of Things -------------	10,000
Communications, Utilities, and Misc. Charges ----------------------	31,000
Printing and Reproduction ------------	8,000
Other Services -----------------------	114,000
Supplies and Materials ---------------	48,000
Equipment ----------------------------	78,000
Total ------------------------	$ -300,000

Scientific and Technical Publications

Objective: To make available, through various types of scientific publications, the results of water resources research and investigations.

Base Program: The issuance of scientific and technical publications is central to the accomplishment of the Geological Survey mission and provides the most important vehicle by which the results of research and investigations are made available for use by other governmental agencies, the private sector, and the general public. The results of water resources research and investigations are published in a wide variety of technical book and map reports, for example: water-resources investigations; circulars; water-supply papers; professional papers; journal articles; data reports; open-file reports; cooperator series; and miscellaneous maps and reports. Funding for (a) publications planning, (b) technical review and approval, (c) scientific editing and illustrating, and (d) typesetting, design, and layout of technical and scientific reports is provided through this line item.

Anticipated program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Total publications processed	1,500	1,500	1,550	1,550

Average units costs for FY 1987 are: 1,550 publications processed @ $1,400

National Water-Quality Assessment Program

Objective: To define the quality of the Nation's surface- and ground-water resources through a continuing assessment program of nationwide scope that would: (1) describe the status and temporal trends in water quality; and (2) improve the understanding of the factors which influence water quality and thereby provide the basis to forecast change and evaluate the likely effect of various proposed remedial and protective actions on water quality.

Base Program: To help support the development of national, regional, and local policy related to degraded water quality, the Department of the Interior (DOI), in consultation with other Federal agencies and States, is developing a conceptual design, has begun prototype studies and is planning to begin implementation of a continuing program of data acquisition, interpretation, and assessment of the quality of the Nation's water resources.

Support for this program in FY 1987 is expected to be derived as follows: (1) the continuation of the FY 1986 appropriation level of $2,485,000; (2) the FY 1987 requested funding increase of $515,000; and (3) the goal of seeking active participation and funding support from State and local cooperating agencies and other Federal agencies. The National Water-Quality Assessment Program would build upon an existing base of ongoing USGS water-quality activities.

PROGRAM DESIGN CONSIDERATIONS

Recognizing the extensive activities and multiple objectives of many agencies at all levels of government that relate to water quality, a primary element of the initial phase of developing a national water-quality assessment program has been interagency consultation to ensure that related information needs can be served to the extent possible.

In FY 1986, the Department of the Interior is testing the conceptual design for a National Water-Quality Assessment Program developed by the Geological Survey. The design of a National Water-Quality Assessment Program will undergo modification as interagency consultation efforts proceed. To date, the USGS and the DOI also have engaged in extensive consultation with representatives of State and local government, and other Federal agencies who are potential beneficiaries, participants, and co-sponsors of a National Water-Quality Assessment Program. Through these planning and consultation efforts, the DOI is developing a sound framework for interagency cooperation and participation that will ensure that the program is appropriately responsive to the information needs of other Federal, State, and local agencies.

A National Water-Quality Assessment Program, could provide decisionmakers at the Federal, State, and local levels with current, scientifically sound, and nationally consistent information on water-quality conditions and trends. To achieve these purposes, the program approach currently being reviewed by the Department focuses primarily on the major components of the resource: ground water and surface water. The information developed by such a program could serve to identify problem areas (and non-problem areas as well), and assist in the measurement of progress towards achieving national water-quality objectives. To facilitate discussions with other agencies, the USGS has prepared and the Department is reviewing a proposal of how such a national assessment might be conducted. The remainder of this section describes the characteristics of that proposal which would provide a frame of reference, in terms of the structure of a national assessment program and the information that it could produce. Also identified are those prototype activities that will be initiated in FY 1986. The Department will be reviewing the comments received from other agencies concerning the USGS proposal and will prepare a financial plan proposing funding options considering the continuing effort needed to reduce the Federal defecit. Funding options would include opportunities for co-funding. The Department will then submit its proposal for review through the formal budget process.

INTERPRETIVE SURFACE AND GROUND-WATER STUDIES AND RESEARCH

The proposed effort now being considered would be national in scope, and organized by hydrologic units (river basins and aquifers). Organization into these "study units" would be a key feature of the proposal which enables it to provide an understanding of the causes of water-quality conditions and to have maximum relevance to the water-quality management needs of Federal, State and local agencies.

For surface water, at the fully implemented level, the approach would focus on approximately 90 study units, a set of large watersheds, chosen so as to account in aggregate for more than 80 percent of the surface-water withdrawals in the Nation although incorporating only about 40 percent of the Nation's land area. The schedule of investigations would be rotational, so that only one-third of the 90 study units would be under intensive investigations at any one time, and the nationwide effort would remain at a uniform level. Within a given study unit, the 3-year periods of intensive study would utilize both fixed-station data collection and synoptic measurements, and would involve extensive scientific analysis and interpretation. The initial intensive phase in each study unit would lead to a characterization of the present state of surface-water quality and would provide an understanding of the factors influencing these conditions. Subsequent intensive studies would focus on the changes that are occurring with time. During the 6-year intervals between periods of intensive study, data collection would be maintained in each unit at the level required to track significant changes with time. In FY 1986, surface-water prototype studies will begin in four river basins.

The design of a comparable effort to assess national ground-water quality is considerably more complex, requiring the development of new approaches to construct regional and national perspectives from relatively sparse arrays of data. Efforts would be initiated to adapt existing statistical concepts, such as iterative search, to evaluate and appraise ground-water quality. As this activity proceeds, immediate steps can be taken to expand the information base on ground-water quality. As a part of its prototype studies, the following efforts will be started in FY 1986: (1) augment ongoing and completed geohydrologic investigations to begin establishing a national base line of organic water-quality information; (2) conduct sampling of ground-water quality in the immediate vicinity of recognized contaminant sources; (3) expand ongoing efforts to locate, evaluate, and acquire existing data on ground-water contamination in the files of State and local agencies; and (4) begin prototype studies to test and develop techniques and strategies for large-scale ground-water quality investigations. In FY 1986, ground-water prototype studies will begin for four major aquifer systems.

Increase for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	2,485	3,000	+515
(FTE-T)	(50)	(50)	(--)

In response to increasing concern about deterioration in the quality of the Nation's water, the USGS began prototype studies of a national program in FY 1986 to provide water-quality data and analyses on major surface-water basins and ground-water systems. Funding of $2.5 million in FY 1986 will be used to: (1) design methods for accomplishing large-scale water-quality investigations; (2) support development of sampling and analytical techniques for detecting man-made organic constituents; and (3) carry on eight prototype projects, four each focusing on surface water and ground water. The selection process for field projects involves consultation with State, regional, and Federal agencies. With increased funding requested for FY 1987 (+$515,000), the USGS would initiate two additional field investigations, one each in surface water and ground water.

Distribution of change by object class:

The object class detail for the proposed $515,000 increase is as follows:

	Amount
Travel and Transportation of Persons -	$ 80,000
Transportation of Things -------------	10,000
Communications, Utilities, and Misc. Charges ----------------------	35,000
Printing and Reproduction ------------	5,000
Other Services -----------------------	230,000
Supplies and Materials ---------------	5,000
Equipment ----------------------------	150,000
Total ------------------------	$ +515,000

Justification of Program and Performance

Activity: Water Resources Investigations
Subactivity: National Water Resources Research & Information System - Federal/State Cooperative Program

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Data Collection and Analysis, Areal Appraisals, and Special Studies	$	43841		44495	42259	-2236
	FTE-T	1332		1332	1332	0
Water Use	$	3835		3841	3841	0
	FTE-T	32		32	32	0
Coal Hydrology	$	4334		4399	4399	0
	FTE-T	138		138	138	0
Total Requirements	$	52010	49774	52735	50499	-2236
	FTE-T	1502	1502	1502	1502	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
52010	-2236	49744

Data Collection and Analysis, Areal Appraisals, and Special Studies:
Discontinue the collection of hydrologic data at the following sites:
- 100 surface-water, discharge, continuous-record stations
- 150 ground-water, water-level, continuous-record stations
- 300 ground-water, water-level, scheduled, long-term stations
- 100 ground-water, water-quality, scheduled, long-term stations

Reduce the number of hydrologic investigations conducted in cooperation with State and local governments by 30. With the matching requirements of the Federal/State Cooperative Program, a reduction of this amount in Federal funding will result in an equivalent reduction in funding provided by State and local cooperating agencies.

Water Use: Funding will be reduced "across-the-board" in each of the 26 State Water Use Programs which were classified as fully implemented in FY 1985. Plans to enhance water use programs in five States to achieve the fully implemented level will be deferred. "Fully implemented" refers to the existence of an operational State Water Use Data System capable of storing and retrieving data for all water-use categories; "partially implemented" programs may only have information for certain categories and may not have the data automated.

Coal Hydrology: Reduce by four the number of coal hydrology investigations conducted in cooperation with State and local governments.

Authorization

43 U.S.C. 31,49,50 20 Stat. 394 P.L. 70-100 Pub. Res. (74-)29 P.L. 98-473	(Organic) Act of March 3, 1879, as amended (1928, 1935); and restated in annual appropriation acts--most recent: P.L. 99-190, December 1985; the language is "... no part of this appropriation shall be used to pay more than one-half the cost of any ... water resources investigations carried on in cooperation with any State or municipality."
33 U.S.C. 1251 *et seq.* P.L. 92-500 P.L. 95-217	Federal Water Pollution Control Act Amendments of 1972 and its successor, the Clean Water Act of 1977, authorize extensive water-quality planning, studies, and monitoring under the direction primarily of the EPA. The Geological Survey is called upon to participate in many of these activities, partly by EPA and partly by State agencies in the Federal-State Cooperative Program.
P.L. 93-322	Special Energy Research and Development Appropriation Act, 1975, provided funds "for energy research and development activities of certain departments ...." The Geological Survey's water resources investigations in coal hydrology support that legislation.
30 U.S.C. 1201 *et seq.* P.L. 95-87	Surface Mining Control and Reclamation Act of 1977, as amended, established the Office of Surface Mining Reclamation and Enforcement (OSM). OSM depends in part upon the Geological Survey for a determination of the probable hydrologic consequences of mining and reclamation operations.
P.L. 96-294	Title VII of the Energy Security Act (1980) calls for an "Acid Precipitation Program and Carbon Dioxide Study." The Geological Survey is an active participant in the ensuing studies of acid precipitation as a result of prior work in this field in the Federal and Federal-State Cooperative Programs.

P.L. 96-510	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) established a "superfund" to pay in part for the massive cleanup programs needed at sites that are heavily contaminated with toxic wastes. The Geological Survey is called upon by EPA and State agencies to investigate and determine the extent of contamination and remedial measures at some of these sites.
63 Stat. 145 P.L. 81-82 (Arkansas River Compact) 65 Stat. 663 P.L. 82-231 (Yellowstone River Compact)	Congress has granted its consent to many interstate water compacts. For 10 such compacts (including the two noted), the Geological Survey provides administrative support for the Federal representative, usually appointed by the President. Also, the Geological Survey collects the hydrologic data needed for administration of 25 interstate compacts. The data collection is supported partly by the Federal Program and partly by the Federal-State Cooperative Program.

Data Collection and Analysis, Areal Appraisals, and Special Studies

Objective: To maintain cooperatively, through Joint Funding Agreements (50-50 matching), a continuing record of the quantity and quality of the Nation's surface- and ground-water resources; to improve the hydrologic information available for use by Federal, State, and local agencies in developing, utilizing, conserving, and managing water and land resources to meet the Nation's needs for water and to fulfill the mandated requirements for clean water, pollution abatement, and environmental protection; and to provide continuing analytical, interpretive and predictive studies and appraisals of the quantity, quality, and use of the Nation's water resources.

The Federal-State Cooperative Program is regarded as a mechanism to carry out a major part of the Geological Survey's coordinated program of water resources investigations. In many places, the Cooperative Program provides the only source of support for water data collection and investigations required to assess, on a continuing basis, the status of the Nation's water resources. Clearly, the Cooperative Program cannot, and does not, exist apart from other activities conducted within the overall Water Resources Investigations program of the USGS. The sum total of efforts performed in the Federal and the Federal-State Cooperative subactivities represents a balanced, coordinated, and highly interactive program of fact-finding, investigations, and research regarding the Nation's water resources.

Base Program: Development, utilization, and conservation of the Nation's water resources require an adequate data base. The continuing Cooperative Program provides more than half of the Nation's data and information base regarding water quantity and responds in a timely manner to the varying and increasing requirements of agencies at all levels of government that have responsibilities for water resources. The program is developed in response to mutual local, State, and Federal needs and involves more than 900 cooperating agencies. Projects are jointly planned by Federal and State or local representatives at the grass-roots level, assuring optimum consideration for the priorities of each, but are reviewed at the regional and national levels for program and funding priorities. Information and issues that are identified through the National Water Summary are taken into consideration in developing program priorities for water resources investigations in the Federal-State Cooperative Program, and overall Federal priorities are employed in the selection of projects for joint funding.

It is presently estimated that the level of cooperator interest in the entire program in FY 1987 will be expressed in their identification of $70,969,000 in water resources investigations as candidates for matching Federal funds (see Figure W-3).

Existing hydrologic data commonly are used in appraisals and studies. However, in many cases it is necessary to collect additional data and information which complement the available information. All data and analytical studies are made available to users through reports of investigations, the National Water Data Storage and Retrieval System (WATSTORE), the National Water Data Exchange (NAWDEX) Program, the Water Resources Scientific Information Center (WRSIC), and various publications.

a. Cooperative Data Collection Activities - Cooperatively funded hydrologic data-collection activities are underway in every State, Guam, Puerto Rico, and the U.S. Virgin Islands. Practically all the Geological Survey's data collection stations serve several purposes. In addition to providing information responsive to State or local needs, the Federal-State Cooperative Program stations (see Figure W-1) provide information that satisfies the needs of many Federal agencies--for example: flood prediction, land-use planning, streamflow regulation, hydroelectric power production, waste disposal standards, pollution regulation, and energy development. The operation of data-collection network stations is a continuing activity. Although many data-collection stations are operated on a long-term basis as components of national networks, some are discontinued each year when their purpose has been served; new stations are added in response to changing needs and priorities.

Figure W-1 shows that in FY 1985 the Federal-State Cooperative Program provided sole support for nearly half the continuous streamflow discharge stations in the total USGS network; and, in combination with other funding sources, provided partial support for another 23 percent of the total network of these stations. The entire stream gaging program of the USGS which includes gaging stations funded by the Federal Program, the Federal-State Cooperative Program, and the reimbursable program is being systematically analyzed to improve its effectiveness. This nationwide analysis includes the identification of alternate methods, such as flow routing and statistical regression models, of providing streamflow data and information.

b. Cooperative Hydrologic Studies and Investigations - In addition to the data-collection activities, approximately 550 hydrologic investigations will be underway in FY 1986; these will include areal appraisals and special studies and will be conducted throughout the Nation. Areal water-resources appraisals (which range from small basin or county to statewide or regional in size) define, characterize, and evaluate the extent, quality, and availability of the water resource. During the past decade or so, increasing emphasis has been given in the conduct of these investigations to water-quality issues, including aquifer contamination, acid rain, river quality assessments, and storm runoff.

Special analytical and interpretive studies address existing and foreseeable hydrologic conditions and problems, are somewhat more specific in nature and smaller in size than areal appraisals, and sometimes involve applied research. They may require from a few months to 2 or 3 years to complete, and result in analytical, interpretive, and predictive reports, data, and information leading to the solution of problems or more complete utilization and protection of the Nation's water resources.

Deterioration in the quality of water supplies for domestic, municipal, industrial, and agricultural uses is a growing problem, which can affect human health as well as the economy. In spite of considerable progress in solving complex water problems, stresses impacting the quality of the surface and ground waters are multiplying. Ground water supplies drinking water for at least half of the Nation's population. In some places, especially in densely populated and industrialized areas, disposal of toxic wastes has made ground water unsafe for use. For an isolated point source of contamination, such as an industrial disposal pond, the consequences may be severe in magnitude but only local in extent. In some places, however, many separate agricultural and industrial activities located over a large area are contributing to widespread contamination. The Nation's rivers have historically been used for water supplies, dilution of waste, recreation, commerce, and for production of fish and other aquatic crops. These uses are not all compatible, and over time many problems have surfaced which managers are attempting to solve.

Priorities for data collection and hydrologic investigations are based on a detailed analysis of water problems and issues. The USGS and its cooperating agencies work together in a continuing process that leads to adjustments in each year's program. This process is guided by a determination of the key hydrologic problems and issues requiring priority consideration in the selection of new, or the retention of ongoing projects in the overall program. In FY 1986 and FY 1987, cooperative investigations will address a variety of water-quality concerns including ground-water and surface-water quality, waste disposal and pollution, as well as problems and needs related to water resources availability and distribution. These studies respond to the increasing need for information at local, State, regional, and national levels. The final selection of new projects is timed to coincide with critical points in the budgetary cycles of the Federal government and the numerous State and local cooperating governments. With respect to the Federal government's budgeting cycle, specific negotiations for the upcoming fiscal year regarding individual projects are initiated with cooperators during January -March and are based on the provisions of the President's Budget submission to Congress and may subsequently be modified based on appropriations actions taken by Congress.

Emphasis given to water-quality issues (including ground-water contamination) in the Federal-State Cooperative Program has increased significantly over the past 5 years. At present, nearly three-fourths of the investigations undertaken in the Federal-State Cooperative Program address water-quality concerns; of these, one in four is principally concerned with hazardous-substances contamination of surface water or ground water.

In FY 1986 the USGS will augment its technical assistance to State and local governments on ground-water contamination and related issues. This, in part, will support the Environmental Protection Agency Ground-Water Protection

Strategy which was released in August 1984. The need for accelerated effort in this area is of pressing importance to both the Federal and non-Federal sectors. This increased emphasis will continue in FY 1987. A growing number of requests for assistance is expected from State agencies responsible for ground-water protection and controlling sources of contamination. Activities will focus on hydrologic data collection and investigations to determine the extent and types of contamination in places with highest priority problems and will help guide decisions on ground-water protection.

Examples of recent cooperative investigations include:

- Salt-water contamination, Central Oklahoma--An investigation of the impacts of salt water in the Vamoosa-Ada aquifer of central Oklahoma is underway in cooperation with the Oklahoma Geological Survey. Indices developed to identify brine contamination in surface- and ground-water resources in this area may have application in other parts of the country. More than 80 stream and well sites have been identified as contaminated by brine in the 1,700 square mile area of study. Geophysical logs indicate a possible rise in the interface between the fresh-water and salt-water layers in the Vamoosa-Ada aquifer.

- Identification of ground-water problems in Arkansas--The Geological Survey, in support of Arkansas' ground-water protection strategy, has prepared a report that identifies existing and potential ground-water problems in the State. The problems documented include poor natural water quality, salt-water intrusion, aquifer contamination, low yields from fractured rock aquifers, and water-level declines in principal aquifers. Part of the process was to categorize areas of the State as high, medium, or low recharge zones.

- Evaluation of ground-water resources, Los Osos Basin, San Luis Obispo County, California--In the coastal areas of California, the limiting factor on future development is typically the availability of water supplies. Many of the aquifers in these areas are subject to contamination from land-use practices and from salt-water intrusion caused by declining ground-water levels. San Luis Obispo County requested an investigation of the Los Osos basin to determine the extent of such problems and to develop plans for improved water-resources management in the area. The initial results of the Geological Survey's work have provided significant new information: clearer definition of the characteristics and areal extent of the confining layer indicates that contamination of the water-supply aquifer from the upper aquifer is not an immediate concern; in addition, a previously unmapped water-bearing formation has been identified, which presents potential for development of additional water supplies.

- Water-quality characteristics of the proposed Swatara Creek Reservoir, Pennsylvania--The quality of water to be impounded by a dam on Swatara Creek may not be acceptable for maintaining a warm-water fishery or for water-contact recreation. In addition, releases from the reservoir may degrade the water quality downstream in Swatara Creek. Acid-mine drainage has been identified as the principal contributor to the poor water quality. Construction on this $40 million dam project has been halted pending resolution of the water-quality issues.

- Ground-water contamination, Battle Creek, Michigan--The Geological Survey conducted an investigation to assist the city of Battle Creek in developing alternatives to alleviate contamination of its municipal water-supply well field. Based on definition of the local geohydrologic system, a ground-water model was structured to determine direction and rate of flow so as to relate the quality of water in the wells to possible sources of contamination. On the basis of this information, wells were selected to pump the contaminated water from the area. The water thus removed was treated by aeration and carbon filtration to remove the contaminants and subsequently was discharged into the hydrologic system. This resulted in decreased contamination in all supply wells; in some, contamination could no longer be detected. Plans are to continue to use the ground-water flow model to design further remedial measures for aquifer restoration.

Selected program outputs are:	FY 1985 Estimate	FY 1986 [illegible]	FY 1987 Base	FY 1987 Estimate
Cooperative Data-Collection Activities	(See Figure [illegible])			
Number of active Federal-State Cooperative Program studies and investigations	[illegible]	[illegible]	[illegible]	[illegible]
--Number of active investigations involving water-quality considerations	([illegible])	([illegible])	([illegible])	([illegible])
--Number of active water-quality investigations principally concerned with hazardous substance contamination of surface or ground water	([illegible])	([illegible])	([illegible])	([illegible])

Average unit costs for investigations projects (Federal funds only) are about [illegible].

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	[illegible]	[illegible]	[illegible]
(FTE-O)	([illegible])	([illegible])	([illegible])

As compared to the FY 1986 enacted level, the decrease in funding will result in discontinuing the collection of hydrologic data at the following sites:

- 120 surface-water, discharge, continuous-record stations
- 200 ground-water, water-level, continuous-record stations
- 250 ground-water, water-level, scheduled, long-term stations
- 150 ground-water, water-quality, scheduled, long-term stations

Efforts will be made to select those sites for discontinuance in such a way as to lessen the impact on the needs of Federal, State, and local agencies for hydrologic information, particularly the National Weather Service with respect to flood forecasting and warning. In addition, about 35 fewer hydrologic investigations will be conducted with State and local governments, focusing on areas such as water quality, water supply and demand, and hydrologic hazards. With the matching requirements of the Federal/State Cooperative program, a reduction in Federal funds will result in an equivalent reduction in funding provided by the State and local cooperating agencies.

Distribution of change by object class:

The object class detail for the proposed $2,236,000 decrease is as follows:

	Amount
Travel and Transportation of Persons -	$ 90,000
Transportation of Things --------------	86,000
Communications, Utilities, and Misc. Charges ----------------------	260,000
Printing and Reproduction -------------	62,000
Other Services ------------------------	1,003,000
Supplies and Materials ----------------	310,000
Equipment -----------------------------	425,000
Total -------------------------	$ -2,236,000

Water Use

Objective: To implement a National Water-Use Information Program to: 1) determine how much water is withdrawn for use, how much water is consumed during use, the purpose for which water is used, where and how much water is returned, the effect of use on water quality, and the factors which influence water use; and 2) make accurate, consistent, and timely water-use information available to water policy makers, planners, managers, and other potential users.

Base Program: The program was started in FY 1978 to provide for the comprehensive and systematic collection, storage, analysis, and dissemination of water-use data and information throughout the United States. Statistics on domestic, industrial, and agricultural water use are required for the planning, management, and development of the Nation's water resources and to provide information that will assist in identifying and resolving critical water problems related to resource allocations, environmental impacts, energy development, and water quality residuals. The program is designed and managed by the Geological Survey and the system is being developed in stages in cooperation with State and Federal agencies. The labor-intensive collection of data at the field level is done by State or local agency personnel.

In FY 1987, 50 States and Puerto Rico will be participating in the National Water-Use Information Program. In some States that have completed labor-intensive data collection inventories, less labor-intensive sampling strategies and techniques are being developed to update the data. The State Water-Use Data System (SWUDS) developed by the USGS will be used in at least 30 States by 1987. This will provide more efficient storage and retrieval of water-use information in those States that have the systems and will expedite transfer of this information to the National Water-Use Data System (NWUDS). The remaining States will utilize their own data management systems for managing the water-use data.

Recent accomplishments include:

Training: Regional workshops were held in the Northeast and Southeast Regions in FY 1985, and will be held in the Central and Western Regions in FY 1986, to further acquaint State and Federal personnel with the scope and objectives of the program and to initiate training in procedures for developing and maintaining the NWUDS and implementing and using the SWUDS.

National Water-Use Data System: The NWUDS, developed by the USGS, consists of computer software to store, maintain, and retrieve water-use information at both the national and State levels. NWUDS became operational in 1980 and is the national data base that contains aggregated estimates of water use by county and hydrologic unit. The national system is maintained at the Geological Survey's National Center in Reston, Virginia. As of December 1985, 46 States and Puerto Rico have entered some data for several categories of water use for several years.

The SWUDS, developed by the USGS, consists of computer software to store, manage, and retrieve water-use information at the State level. SWUDS became available in 1982 and is a State data base that contains site-specific information for individual users. The State data system is maintained in each State by either the Geological Survey's District Office or by a cooperating State agency. Site-specific information at the State level can be automatically aggregated and entered into the national system. Enhancements are continuously being made to make the data system more usable and more efficient.

Equipment Research: Research and design of methods and equipment to obtain accurate water-use data are continuing. Several techniques for indirect measurement were tested and, together with appropriate equipment, are now in use. Remote sensing techniques are being examined for use in determining acres irrigated.

Publications: In the fiscal years 1983-1985, more than 50 State water-use reports were published. A summary report, "Estimated Water Use in the United States in 1985," will be published in 1987. The National Water Summary, 1987, will summarize and expand the 1985 water-use information for each State. In FY 1987, approximately 15 State water-use reports will be published.

Program size varies with the degree of implementation of the program in each State and the availability of funding. Individual program size will range in size from $10,000 to $125,000 in FY 1987.

	State Participation			
	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Program Partially Implemented ----------	23	18	19	19
Program Fully Implemented* -------------	26	31	31	31
Total -----	49	49	50	50

* Includes Puerto Rico.

Coal Hydrology

Objective: To assess hydrologic conditions and water supply problems related to coal mining, and land reclamation as these needs are identified jointly by the Geological Survey and by State and local governments. These studies will expedite the preparation of applications for mining permits and mine plans by the coal industry by providing needed hydrologic data. The data will also aid State authorities in reviewing the applications and plans.

Base Program: This program is financed through joint funding arrangements with State and local governments. Such funding arrangements have the advantage of allowing State and local governments to express their priorities through their willingness to provide at least 50 percent of the cost of the activities. At the same time it allows for a National perspective because the USGS gives weight to those projects which also support the national interest.

Activities specifically identified for the Federal-State cooperative coal hydrology program began in 1976; in FY 1985, there were approximately 80 projects underway in 27 States. These projects included collection of hydrologic data, areal hydrologic studies of surface- and ground-water, small watershed investigations, and water-quality studies in mined and reclaimed areas. Also included were research activities on effects of deep mining on ground water, underground effects of mine collapse on water resources, hydrology of last-cut coal mine lakes, and effects of subsurface mining on salt-water migration. Some of these cooperative projects also produce information relevant to the assessment of the cumulative hydrologic impacts of coal development and reclamation practices.

The FY 1986 and FY 1987 programs will continue at about the same level as FY 1985. Specific requirements will be met by determining the priority areas in which mining is currently or is likely to become of major economic importance. Hydrologic networks will be established in these priority areas to collect data during premining baseline conditions for comparison with data gathered during and following mining to determine impacts of mining. The USGS and its cooperating agencies work together in a continuing process that leads to development of each year's program. The process provides the opportunity to consult with other Federal agencies (e.g., Bureau of Mines and Office of Surface Mining) and to tailor program content to accommodate emerging priorities.

Typical reports include:

- "Geochemistry and Geohydrology of the West Decker and Big Sky Coal Mining Areas, Southeastern Montana"
- "Classification of Stream Basins in Southeastern Ohio According to the Extent of Surface Coal Mining"
- "Use of Selected Basin Characteristics to Estimate Mean Annual Runoff and Peak Discharges for Ungaged Streams in Drainage Basins Containing Strippable Coal Resources, Northwestern New Mexico"
- "Physical and Chemical Characteristics of Water in Eastern Oklahoma Coal-Mine Ponds"
- "Effects of Coal Mining on the Water Quality and Sedimentation of Lake Tuscaloosa and Selected Tributaries, North River Basin, Alabama"
- "Ground-Water Resources and Potential Hydrologic Effects of Surface Coal Mining in the Northern Powder River Basin, Southeastern Montana"
- "The Effects of Coal Mining on the Hydrologic Environment of Selected Stream Basins in Southern West Virginia"

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Projects underway ---------------------	80	80	80	80

Average unit costs (Federal side) for selected program outputs for FY 1987 Estimate:

Projects underway --------------------------------- 80 @ $55,000

Estimated State and Other Non-Federal Agency Offerings

Estimated non-Federal offerings for the entire Federal-State Cooperative Program to be matched in FY 1986 and offered for matching in FY 1987 are shown in Figure W-3.

WATER RESOURCES INVESTIGATIONS
FEDERAL-STATE COOPERATIVE PROGRAM
ESTIMATES OF STATE AND OTHER NON-FEDERAL AGENCY OFFERINGS FOR FY 1987
(Thousands of Dollars)

State	Estimated State Funds to be Matched in 1986 (Enacted Level)	Estimated Offerings for Matching 1987	Increase (+) Decrease (-)
Alabama	877	900	+ 23
Alaska	1,394	1,745	+ 351
Arizona	923	1,202	+ 279
Arkansas	632	750	+ 118
California	3,042	4,000	+ 958
Colorado	1,718	2,050	+ 332
Connecticut	530	785	+ 255
Delaware	178	250	+ 72
Florida	4,724	7,300	+ 2,576
Georgia	1,210	1,500	+ 290
Hawaii	627	663	+ 36
Idaho	840	1,159	+ 319
Illinois	823	1,170	+ 347
Indiana	1,064	1,485	+ 421
Iowa	636	907	+ 271
Kansas	944	1,963	+ 1,019
Kentucky	710	800	+ 90
Louisiana	1,430	1,600	+ 170
Maine	321	355	+ 34
Maryland	873	1,100	+ 227
Massachusetts	885	1,800	+ 915
Michigan	611	850	+ 239
Minnesota	693	940	+ 247
Mississippi	664	700	+ 36
Missouri	498	690	+ 192
Montana	737	850	+ 113
Nebraska	652	637	- 15
Nevada	912	1,309	+ 397
New Hampshire	196	450	+ 254
New Jersey	1,189	3,992	+ 2,803
New Mexico	1,493	1,890	+ 397
New York	2,357	2,750	+ 393
North Carolina	1,050	900	- 150
North Dakota	720	890	+ 170
Ohio	855	1,230	+ 375
Oklahoma	736	900	+ 164
Oregon	739	1,080	+ 341
Pennsylvania	1,646	2,460	+ 814
Rhode Island	142	310	+ 168
South Carolina	732	1,200	+ 468
South Dakota	696	840	+ 144
Tennessee	970	1,200	+ 230
Texas	2,454	3,100	+ 646
Utah	1,018	1,290	+ 272
Vermont	60	70	+ 10
Virginia	621	850	+ 229
Washington	1,520	1,600	+ 80
West Virginia	501	748	+ 247
Wisconsin	1,107	1,371	+ 264
Wyoming	894	950	+ 56
American Samoa	48	51	+ 3
D.C.	2	64	+ 62
Guam	44	57	+ 13
Northern Marianas	16	16	0
Puerto Rico	874	1,000	+ 126
Trust Terr. Pac.	149	180	+ 31
Virgin Islands	33	70	+ 37
Total	52,010	70,969	+18,959

Summary for FY 1987

Estimated Offerings for Matching	$ 70,969
Budget Request	50,499
Shortfall (Offerings in Excess of Budget Request)	20,470

Figure W-3

Justification of Program and Performance

Activity: Water Resources Investigations
Subactivity: National Water Resources Research & Information System - State Research Institutes, & Research Grants Program

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
State Water Resources Research Institutes	$	6436		6436	5153	-1283
	FTE-T	0		6	6	0
Nat'l. Water Resources Research Grants Program	$	4981		4981	2011	-2970
	FTE-T	0		10	10	0
Program Administration	$	1282		1282	0	-1282
	FTE-T	16		0	0	0
Total Requirements	$	12699	12153	12699	7164	-5535
	FTE-T	16	16	16	16	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L. 99-177 Reduction	FY 1986 Adjusted Approp.
12699	-546	12153

State Water Resources Research Institutes: The amount of the grant made to each of the 54 Institutes will be reduced by 4.3 percent (or by about $5,100) from the amounts that would have been granted at the FY 1986 Enacted level.

National Water Resources Research Grants Program: At the FY 1986 Enacted level it was estimated that the Grants Program could support about 50 research projects (assuming an average Federal project cost of about $100,000). About two fewer research projects will be funded in FY 1986 compared to the original FY 1986 estimate reflecting the impact of the sequestration.

Program Administration: Funding supporting administrative travel associated with the conduct of evaluations of the Water Resources Research Institutes Program will be reduced. Plans to develop new/diversified discipline skills and specialties among those personnel involved in the review and selection of research grant proposals will be deferred.

Authorization

P.L. 98-242 — **Water Resources Research Act of 1984** provides for water resources research, information transfer, and student training in grants and contract programs that will assist the Nation and the States in augmenting their science and technology to discover practical solutions to water shortage and quality deterioration problems.

Overview

The Nation is currently faced with a wide array of water-related problems for which ambitious remedial schemes are frequently proposed. The problems are complex in nature; uncertainties and controversies exist, not only with respect to remedial action, but with respect to the causes and extent of the problems themselves. In this environment, there is a strong potential for misdirected action, generating costly but ineffective programs both in water management and in environmental protection.

In enacting the Water Resources Research Act of 1984, the Congress recognized that small investments in research provide a more complete understanding of the problems and can lead to large savings. The act mandates that research investments be well placed and carefully monitored, that the most critical information needs be addressed, that research efforts be effectively coordinated and unnecessary duplication avoided, and that research results be communicated promptly to policymakers, management and regulatory agencies, and the public.

State Water Resources Research Institutes Program (Section 104)

Objective: To operate Water Resources Research Technology Institutes in each State which will plan, facilitate, and conduct research in water resources; to promote the dissemination and application of research results; and to provide the training of scientists and engineers through their participation in this research. The work of these Institutes will be designed to aid in the resolution of State and regional water and related land problems.

Base Program: Section 104 of P.L. 98-242 authorizes the establishment of 57 (maximum) Water Resources Research Technology Institutes, one in each of the 50 States, the District of Columbia, and territories, with funding not to exceed $10 million in each of 5 years, and with the Federal to non-Federal cost-sharing ratio changing in increments from 1:1 in 1985, to 1:1½ in 1987, and to 1:2 by 1989. Careful and detailed on-site evaluation of each Institute will be conducted by the end of 1987 to determine its eligibility to continue to receive grants. Rules and regulations issued by the Geological Survey guide operation of the annual granting process.

Each Institute operates a program of multi-year research and information transfer projects focused on State and regional priorities established for the period 1985-1989. Students receive training by their participation as research or information transfer assistants in the projects. The USGS assists the Institutes with identification of their 5-year priorities.

In the process of establishing annual priorities and evaluating project proposals, the Institutes work closely with each other in eight regions, along with the USGS, to avoid undesirable duplication of effort. Institutes are responsible for the design and conduct of, and for reports on, their programs. The USGS evaluates each Institute program proposal based on adherence to priorities and consistency with the rules and regulations. It also reviews annual reports from Institutes on use of the grants.

More than half the expenditures for research in this program deal with water-quality deterioration. The principal themes of this research are: contaminant-source identification, transport mechanisms, fate of contaminants, and methods to restore water quality or to prevent further degradation. Research on water shortages, the second major category, is conducted principally in the western States. Increased efficiency of irrigation, artificial recharge, and conjunctive use of surface and ground waters are the primary aspects of this category of research.

Information transfer consists of technical reports and newsletters to disseminate water resources news and research results to varied audiences. The USGS, by its guidance on proposal preparation, has begun to accelerate the process by which the Institutes transfer information derived from their own research programs and from the research programs of others directly to personnel in State water agencies. In FY 1985, each of the 54 Institutes received a grant of $109,000. In FY 1986, at the funding level enacted in the Appropriations Bill, each Institute would have received a grant of about $119,000.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Number of functioning Water Resources Research Technology Institutes	54	54	54	54

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	6,436	5,153	-1,283
(FTE-T)	(6)	(6)	(--)

This reduction in funding, when coupled with a return to the FY 1985 practice of providing partial funding for program administration from the amounts appropriated to the Institutes Program, will result in a decrease in funding available to each of the 54 Water Resources Research Institutes of approximately 27 percent from the FY 1986 Enacted level.

Distribution of change by object class:

The object class detail for the proposed $1,283,000 decrease is as follows:

	Amount
Other Services ----------------------------	$ +500,000
Grants, Subsidies, and Contributions ----	-1,783,000
Total ----------------------------	$ -1,283,000

National Water Resources Research Grants Program (Section 105)

Objective: To conduct research on water resources related problems that is likely to produce knowledge useful for the resolution of water resources problems facing the States, regions, or the Nation.

Base Program: The Geological Survey administers a program of grants to support research in major water resource problem areas. Under the provisions of Section 105 of the Water Resources Research Act, these grants can be made to Water Resources Research Institutes, universities, foundations, firms, individuals, or agencies of State and local governments. In keeping with the intent of the act, the topical areas of research are broad, covering many disciplines. Some of the topical areas of highest priority for additional research emphasis are:

- Problems of ground-water quality. Research is needed to provide understanding of how ground waters move in their environments and to improve the ability to predict the behavior of these waters in order to manage them effectively. Research emphasis should be on quality aspects such as transport and fate of contaminants. Innovative work is sought to explain the chemical interactions and adsorption phenomena controlling the movement of dissolved substances in aquifers. Investigations are also needed to develop methods for estimating the extent, nature, and severity of ground-water contamination at scales involving more than one contamination site. This could include sampling strategies leading to: (a) improved understanding of contamination with respect to hydrogeologic and land-use characteristics; and (b) increased probability of locating contaminated zones. Improved methods for removal or concentration of pollutants from contaminated ground water are also needed.

- Enhancement of water-use efficiency. Research leading to more efficient water-use techniques could reduce the impacts of projected increased demands and help assure adequate water supplies for the future. Specific research needs include: (a) studies aimed at improving the productivity of water used in agriculture; (b) examination of price/use relationships leading to improved economic incentives for conservation; and (c) research leading to solutions of institutional, legal, and social problems constraining the adoption of measures that would increase efficiency of water use.

- Use of waters of impaired quality. Research is needed to extend the available water supply for the Nation through reclamation of low-quality waters from various potential sources. Specifically, research is important to provide means for more efficient use of the brackish water supplies that are readily available in many areas. Many of these waters may be usable in a cost-effective manner in various aspects of the development of energy and mineral resources. Research may also reveal opportunities to treat and reuse waste waters, agricultural return flows, and other saline supplies. In particular, methods are sought for removal of contaminants such as selenium, boron, nitrate, and any other trace constituents that adversely affect the utilization of these waters. Research may also be beneficial to the development of improved planning and management techniques and to the solution of the social, legal, and institutional problems inhibiting the use of reclaimed waters.

- Climate variability and the hydrologic cycle. Research is needed to develop a better understanding of the hydrologic cycle and its relationship to the ocean/atmospheric/terrestrial climate systems. Specifically, research is sought to: (1) provide better understanding of variability in precipitation, temperature, and runoff as related to variations in large-scale atmospheric and oceanic circulation; (2) develop a better understanding of evapotranspiration under a wide range of climate regimes; and (3) improve the ability to predict the hydrologic response to major, large-scale, oceanic-atmospheric phenomena.

In the FY 1985 program, 24 projects were selected for funding from a total of 368 research grant proposals. These projects address a broad spectrum of water resources problems such as ground-water contamination, surface-water management, water reuse, agricultural drainage, and irrigation management. At the FY 1986 Enacted level, it is estimated that as many as 50 research projects could be funded by the Grants Program.

Selected program outputs are:	FY 1985	FY 1986 Enacted	FY 1987 Base	FY 1987 Estimate
Number of Research Grants Awarded	24*	50 est.	50 est.	20 est.

* Federal costs for FY 1985 research grants range from $28,000 to $150,000 with an average Federal project cost of approximately $100,000.

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	4,981	2,011	-2,970
(FTE-T)	(10)	(10)	(--)

At the reduced level of funding, approximately 20 research projects would be funded, a reduction of about 30 projects from the FY 1986 Enacted level. At the funding level proposed for FY 1987, the USGS would defer attempts to develop focused areas of research within the Grants Program. The requested funds would continue to be applied to the conduct of a broad program of water-resources research in response to the wide range of topics identified in Section 108 of the Water Resources Research Act.

Distribution of change by object class:

The object class detail for the proposed $2,970,000 decrease is as follows:

		Amount
Grants, Subsidies, and Contributions ----	(Total)	$ -2,970,000

Program Administration

The Geological Survey administers and otherwise manages the State Water Resources Research Institute Program (Section 104) and the National Water Resources Research Grants Program (Section 105). Advisory assistance is provided by the Water Science and Technology Board of the National Academies of Science and Engineering on the priorities and procedures of the programs as called for by the act.

During FY 1985, all 54 existing Institutes applied for Federal grants under Section 104; each of these applications was reviewed, negotiated, and awarded. Procedures for the Institute evaluations, mandated by Public Law 98-242, were developed, and implemented at three Institutes in FY 1985. Twenty-nine evaluations are scheduled for FY 1986, and the remaining 22 will be conducted by mid-summer of 1987. A guide for evaluators, prepared prior to starting the evaluations, assists in maintaining consistency in the process by explaining the purposes of the evaluations, the functions of the evaluation team, and the responsibilities of the individual team members. Interim reviews of the evaluation process and its findings are scheduled for December 1985 and December 1986. At the conclusion of the first round of evaluations in 1987, the results of the evaluations will be analyzed to develop and determine options for the future administration of this program.

The USGS administers the grant program mandated by Section 105 so as to encourage the interaction of investigators from a variety of disciplines and organizations. Procedures have been developed to assure appropriate professional interactions between USGS scientists and engineers and grant recipients. Such interaction will serve to strengthen both in-house USGS and grant water research programs.

All proposals made under the Grants Program are reviewed and rated by experts drawn from the academic community, the private sector, and government. Peer panels rank proposals and make recommendations for funding. Evaluation of the research is in terms of scientific and practical contributions as evidenced by publication in scientific journals, as well as technical reports, articles and presentations. The annual process of soliciting, evaluating, selecting, and providing support for research grants proposals occurs in the following time frame:

- o 1st Quarter Fiscal Year--Candidate research grant proposals are solicited by publication of a nationally distributed USGS announcement as well as by notices in the Commerce Business Daily and/or the Federal Register.
- o 2nd Quarter Fiscal Year--Applicants submit research grant proposals for funding.

- o 3rd Quarter Fiscal Year--Research grant proposals are evaluated and selections for funding are made.
- o 3rd and 4th Quarters Fiscal Year--Grants are awarded to selected applicants.

An administrative report is prepared during the first quarter of each fiscal year which provides information on new research grants selected for inclusion in the program in the fiscal year just concluded. This administrative report also includes significant progress and accomplishments in projects funded in previous fiscal years.

The responsibility of the USGS to provide an effective national water-resources research program as described in the legislation requires that an adequate structure be maintained to administer and evaluate the research program. This structure must provide for the review and ranking of all grant proposals received under Section 105 of Public Law 98-242 and the monitoring of all grants and contracts awarded under Public Law 95-467 as well as those awarded under Public Law 98-242. All of these factors require that the USGS apply a total of approximately $1,300,000 in FY 1987 to properly administer the implementation of Public Law 98-242 and to proceed with the orderly close-out of Public Law 95-467.

Of the total amount of $7,164,000 requested for Section 104 and 105 in FY 1987, $500,000 will be used to cover a part of these administrative costs. The $500,000 is within the 15 percent limit for administrative expenses that is specified in Section 107 of Public Law 98-242. The remaining $800,000 required for administration will be provided from prior year unobligated balances which remain available under Public Law 95-467.

In response to the recommendations of the U.S. Senate, an analysis will be conducted in FY 1986 examining the feasibility and desirability of employing a small number of the Water Resources Research Institutes, or other qualified universities, as regional water science centers, each focusing on a specific water problem of national significance. The results of this examination will be considered in formulating future plans for the Institutes and Research Grants Programs.

Decrease for FY 1987	FY 1987 Base	FY 1987 Estimate	Change
$	1,282	--	-1,282
(FTE-T)	(--)	(--)	(--)

The USGS would return to the previous practice of providing funds for Program Administration from the amounts appropriated to the Institutes Program. In FY 1987, approximately $500,000 of program administrative costs would be derived from the Institutes Program. Funds which were appropriated in prior years under Public Law 95-467, and which remain available in FY 1987, would be employed to support remaining administrative requirements of the program.

Distribution of change by object class:

The object class detail for the proposed $1,282,000 decrease is as follows:

	Amount
Travel and Transportation of Persons -	$ 106,000
Transportation of Things --------------	68,000
Communications, Utilities, and Misc. Charges ------------------------	130,000
Printing and Reproduction -------------	40,000
Other Services ------------------------	542,000
Supplies and Materials ----------------	161,000
Equipment -----------------------------	216,000
Total --------------------------	$ -1,282,000

U.S. GEOLOGICAL SURVEY
Analysis by Subactivity

Activity: General Administration

(Dollars in thousands)

Subactivity	FY 1985 Actual B.A.	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase or Decrease (-) FY 1987 Est. over FY 87 Base
Executive Direction	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Administrative Operations	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Management Initiatives Reductions	0	[illegible]	[illegible]	[illegible]	[illegible]	0
Reimbursements to the Department of Labor	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Justification of Program and Performance

Activity: General Administration
Subactivity: Executive Direction

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Office of the Director	$	738		664	664	0
	FTE-T	8		8	8	0
Administrative Support	$	952		898	875	-23
	FTE-T	10		18	18	0
Director's Senior Advisory Staff	$	688		621	621	0
	FTE-T	16		17	17	0
Program Development and Budget	$	957		871	871	0
	FTE-T	19		19	19	0
Office of Congressional Liaison	$	183		179	179	0
	FTE-T	4		4	4	0
Office of Public Affairs	$	428		400	400	0
	FTE-T	8		8	8	0
Office of Equal Employment Op.	$	476		451	451	0
	FTE-T	11		11	11	0
Minority Participation in the Earth Sciences (MPES)	$	666		606	606	0
	FTE-T	3		3	3	0
Total Requirements	$	5087	4890	4690	4667	-23
	FTE-T	79	79	88	88	0
Less Reimbursable Assessments	$	500		100	100	0
	FTE-T	0		0	0	0
Total Appropriated Funds	$	4587	4390	4590	4567	-23
	FTE-T	79	79	88	88	0

Gramm-Rudman-Hollings Impact:

FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
4,587	-197	4,390

To achieve the spending targets mandated by P.L. 99-177 (Gramm-Rudman-Hollings), functions and responsibilities within Executive Direction are being realigned to minimize adverse impacts. Cuts are being taken across-the-board in each activity, wherever feasible.

Authorization

43 U.S.C. 31(a)	The Geological Survey's Organic Act establishes the Office of the Director of the Geological Survey, under the Interior Department. The Director is appointed by the President by and with the advice and consent of the Senate.

Objectives: To provide executive leadership, direction, policy and program guidance, and management coordination of all Bureau programs.

Base Program: Executive Direction of the Geological Survey is comprised of the following elements: Office of the Director, Administrative Support, Director's Senior Advisory Staff, Program Development and Budget, Congressional Liaison, Public Affairs, Equal Employment Opportunity, and Minority Participation in the Earth Sciences.

Priority emphases for Bureau programs include:

- o enhancing the Nation's ability to meet our energy and mineral needs with domestic resources, through research and investigative efforts having potential for great benefit and wide generic applicability.
- o exploring and assessing resources of the Exclusive Economic Zone (EEZ) in cooperation with other Federal agencies, States, universities, and industry.
- o application of Survey's scientific expertise and information to assess national water conditions, to help ensure an adequate supply of quality water resources, and to solve earth science problems concerning toxic wastes-groundwater contamination, disposal of radioactive wastes, acid rain, and hazardous substances transport through surface water and sediments.
- o developing mapping technology, coordinating Federal digital cartography, and providing leadership in application of Geographic Information Systems (GIS).
- o focus on improving methods to gather, disseminate, and coordinate earth science data, as well as administrative systems data, taking advantage of state-of-the-art technology where appropriate.
- o continuation of programs to enhance the Bureau's relationships with other Federal agencies, State and local governments, and Indian tribes through cooperative research efforts and effective transfer of earth science information.

The Office of the Director reports to the Assistant Secretary--Water and Science, and is responsible for the overall direction and supervision of the Geological Survey. The Director is assisted in the exercise of this responsibility by an immediate staff which consists of the Associate Director, Staff Assistants, and secretarial support. The Washington Liaison Office provides representation at Departmental headquarters for the Director and the Geological Survey programs. The Office serves as a liaison among the Geological Survey, the Secretariat, other bureaus, other agencies and departments, Congress, and the public on matters involving Geological Survey expertise or program interests.

Office of the Director Administrative Support functions are provided from Headquarters nationwide by an Administrative Support Section and the Bureau Security Office. Essential administrative support services encompass: financial management, personnel activities, general services and office support, procurement management, management analysis and improvement activities, support of a Bureauwide Ethics Program, and a Bureauwide Security Program. In addition, coverage is provided for common-use charges, such as: telecommunications, utilities, postage, computer usage, space and equipment rentals, interdivision billings, etc.

The Director's Senior Advisory Staff advises and consults with the Director on an extensive range of scientific and technical matters such as: research priorities; resource and earth-science research program policies and program initiatives; dissemination of research findings, scientific information, and data to the scientific community, special audiences, and the general public. Provides oversight and evaluation of: USGS's programs to assist Department of Energy in the characterization and selection of sites for disposal of radioactive wastes and site selection for nuclear power plants and other critical facilities; Bureau program activities in Alaska; maintenance and coordination of the Geological Survey Emergency Preparedness Plan; the Bureau's environmental activities, including the Bureau's implementation of and compliance with the National Environmental Policy Act (NEPA); geologic hazards warnings and preparedness; coordination of Departmental research and policy matters relative to the Arctic Research and Policy Act of 1984; coordination of the Department's policies relative to radiation; and liaison with other Federal agencies, nonFederal agencies, and industry, as appropriate, with respect to each of these areas of responsibility.

Program Development and Budget staff provides leadership and coordination for the Bureau's program planning, budgeting, analysis, and evaluation activities, economic analyses of Bureau's programs to determine cost/benefits and trends within the Nation's socioeconomic structure, assuring that the results of analytic studies and other program evaluation efforts are reflected in the Bureau's program planning and development processes; a focal point for the coordination of Geological Survey goals, objectives, and programs through systematic multi-year program planning and budgeting; policy guidance and direction for the Bureau's program and budget formulation, presentation, and advocacy; a point of contact for inquiries from the Department, OMB, Congress, and others on these activities. Coordinates the Secretariat and Bureau Management by Objectives Programs, Internal Control Reviews (ICR's), and other program tracking systems. Coordinates the Geological Survey activities involving the General Accounting Office and the Department's Office of the Inspector General.

Congressional Liaison Staff is responsible for liaison with and close coordination between the Geological Survey and the Congress, other Bureaus, and the Department for congressional matters. Staff represents a central source of information for congressional inquiries and furnishes information materials and assistance to the Congress. Staff provides coordination of review of legislation and preparation of testimony for the Geological Survey.

Public Affairs Staff is responsible for advising the Director and other Geological Survey officials on policy and procedures for disseminating information about the Geological Survey activities and products to the public. The Public Affairs Office also directs and operates the Bureau program for providing information to the news media. The staff prepares and distributes news releases to the print and electronic media, prepares and reviews general interest and audio visual products, and answers inquiries from the media and the public. Staff maintains a 7-day, around-the-clock alert with technical divisions to provide information to news media as quickly as possible about hazards and anomalous events such as earthquakes and floods.

Equal Opportunity Staff is responsible for developing, directing, monitoring, and evaluating the Geological Survey Equal Employment Opportunity (EEO) Program in compliance with the EEO Act of 1972 (PL 92-261), Departmental directives, and related statutes and orders. The staff develops, implements, and evaluates the Geological Survey affirmative action program and is responsible for a complaints system which includes EEO counseling for employees and applicants and for providing prompt, fair, and impartial consideration and disposition of complaints involving issues of discrimination on the basis of race, color, religion, sex, national origin, age, mental or physical handicap.

Minority Participation in the Earth Sciences: This program was initiated by the Geological Survey in 1971 in an endeavor to increase participation by members of minority groups in earth-science career fields. The effort has been subscribed to by professional societies, colleges and universities, and organizations representing various minority groups. Subsequently, women and disadvantaged young people have been included in the program. The current principal focus is to provide direct employment to members of the benefiting groups, primarily at the undergraduate and graduate levels, and to some extent at the upper high school level, to permit opportunities for work with scientists and engineers on real problems while the participants assess the potential for pursuit of careers in the earth sciences. In addition, program efforts are directed to creation, or enhancement, of earth science curricula in Historically Black Colleges and Universities or in those institutions with prominent minority representation. These undertakings frequently permit development of cooperative education programs with these institutions.

Decrease for FY 1987

(Dollar Amounts in Thousands)

	FY 1987 Base	FY 1987 Estimate	Change
$	4,590	4,567	- 23
(FTE-T)	(80)	(80)	(--)

This reduction will be taken in administrative support services.

Distribution of change by object class

The object class detail for the proposed $23,000 decrease is as follows:

	Amount
Travel of persons	$ 1,000
Transportation of things	1,000
Comm., Utilities & other charges	3,000
Printing & reproduction	1,000
Other Services	9,000
Supplies & materials	4,000
Equipment	4,000
Total	$23,000

Justification of Program and Performance

Activity: General Administration
Subactivity: Administrative Operations

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Administrative Direction and Coordination	$	708		687	687	0
	FTE-T	15		15	15	0
Financial Management	$	2003		1941	1941	0
	FTE-T	77		77	77	0
Personnel Services	$	3899		3779	3779	0
	FTE-T	105		105	105	0
General Services and Office Support	$	2432		2357	2272	-85
	FTE-T	56		56	55	-1
Procurement Activities	$	3586		3475	3475	0
	FTE-T	99		99	99	0
Administrative Systems Management	$	781		756	756	0
	FTE-T	23		23	23	0
Total Requirements	$	13409	13030	12995	12910	-85
	FTE-T	375	375	375	374	-1
Less Reimbursable Assessments	$	4953		4500	4500	0
	FTE-T	123		123	123	0
Management Initiative Reductions	$	-1259		-1259	-1259	0
	FTE-T	-67		-67	-67	0
Total Appropriated Funds	$	7197	6818	7236	7151	-85
	FTE-T	185	185	185	184	-1

Gramm-Rudman-Hollings Impact:

	FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
$	7197	-379	6818

The Gramm-Rudman-Hollings reduction of $379,000 will be incurred across-the-board in all program elements by reducing expenditures for administrative program travel, employee training, contractual services, and by deferral of some planned equipment modernization.

Authorization

P.L. 84-863	Budget Accounting and Procedures Act of 1950
P.L. 97-177	Prompt Payment Act
P.L. 97-255	Federal Managers' Financial Integrity Act of 1982
5 U.S.C. 305 et seq.	Classification Act of 1949, Civil Service Retirement Act, Federal Employees' Compensation Act, Federal Employees' Health Benefits Act, Performance Rating Act of 1950, Civil Service Reform Act of 1978, etc.
5 U.S.C. 552	Freedom of Information Act
5 U.S.C. 552a	Privacy Act of 1974
29 U.S.C. 651	Occupational Safety and Health Act of 1970
40 U.S.C. 606	Public Buildings Act of 1959
40 U.S.C. 471	Federal Property and Administrative Services Act of 1949
41 U.S.C. 35-45	Walsh Healy Public Contracts Act
41 U.S.C. 351-357	Service Contract Act of 1965
41 U.S.C. 601-613	Contract Disputes Act of 1978
42 U.S.C. 1006 et seq.	Solid Waste Disposal Act of 1976
42 U.S.C. 6905	Resource Conservation and Recovery Act of 1980
43 U.S.C. 31a	Survey's Organic Act of March 3, 1879
44 U.S.C. 35	Paperwork Reduction Act

Objective: The Administrative Operations activities provide continuing administrative direction and coordination to the support service aspects of the scientific, research, and technical programs of the Geological Survey. This includes such essential functions as: financial management, personnel services, general services and office support, safety and occupational health, procurement activities, management analysis and improvement efforts and administrative systems management. These functions are directed and carried out by Headquarters Branches and in the field through Regional Management Offices.

Base Program: The major components of Administrative Operations follow:

Administrative Direction and Coordination: This function is performed by the Assistant Director for Administration (who acts as the Chief, Administrative Division), the immediate staff of the Assistant Director for Administration, and two Regional Management Officers (the Central Region Management Officer in Denver, and the Western Region Management Officer in Menlo Park) plus their immediate support staff. The Assistant Director for Administration, assisted by the subordinate Regional Management Officers, directs and coordinates the nationwide service functions provided by the Administrative Division.

Financial Management: The Branch of Financial Management, centrally located at Reston, Virginia, is responsible for formulating, administering and improving the accounting and financial activities of the Geological Survey. This program includes central coordination and control of an integrated expenditure and obligation reports system; control and implementation of cost, allotment and general ledger accounting; payroll processing; voucher and claims examination and processing; and, technical guidance to fiscal activities performed by other Geological Survey offices.

To meet increasing demands to support the Financial Management initiatives which are underway as part of Reform 88, the Geological Survey is continuing a program of making enhancements to its automated Financial Management System (FMS) and initiating reform opportunities. FY 1986 improvement activities will include:

- Completion of the development phase and implementation of a debt management system to reduce delinquent debts and improve the efficiency of reporting amounts owed.
- Implementation of improved statistical sampling techniques and automation of scheduling and interest calculation processes.
- Continuation of indepth Internal Control Reviews for accounting systems and procedures.
- Continued refinement of the Budget Information Management System (BIMS), implemented in FY 1985, to improve information access through more timely reporting, on-line query capability, and automated availability of financial data.

During FY 1987, the Branch of Financial Management will continue to focus on improving workload efficiency measures, such as reduced document handling through continued refinements in micro-imagery systems. An automated procedure for data entry at the point of initiation of financial management transactions will be piloted. Operating improvements to increase efficiencies, strengthen internal controls and ensure accounting system performance in accordance with the Federal Managers' Financial Integrity Act will continue to be emphasized. As part of this effort, the Branch of Financial Management will participate heavily in the Geological Survey's major effort to standardize, consolidate, and link its administrative data systems, the largest of which is the Financial Management System.

Personnel Services: The Headquarters Branch of Personnel plans and develops personnel management policies, programs, and operating procedures which are implemented in the Headquarters and the four field personnel offices. Advice and assistance to all levels of management in developing and administering a modern Personnel program involve day-to-day as well as long-range planning, evaluation, and operational activities in examining, recruitment and selection, placement, retention, position classification, position management, pay administration, employee development, employee relations and services, labor relations, special interest programs, conflict of interest, motivation, discipline, performance evaluation, monetary and honor awards, insurance and annuities, and attendance and leave. Additional activities include production of a variety of essential personnel reports, records, statistics, and the design and application of automated personnel systems to improve delivery of services in a more efficient, cost effective manner.

A wide range of high priority personnel management projects and programs will receive special emphasis in FY 1987.

- Classification and Position Management - In addition to the continuing emphasis on classification and accuracy stemming from the A-123 oversight and OPM reviews and evaluations, the Administration's Grade Bulge Reduction Initiative managed by OMB and OPM has required and will continue to require for the duration of the program concerted Bureau efforts to reduce the number of GS/GM 11-15 positions.

- Personnel Management Evaluations - This program will continue to receive increased emphasis by the Office of Personnel Management. In FY 1987, OPM will visit 12 Bureau offices. Each visit will require the preparation of profile data by the Headquarters and/or regional personnel offices and follow-up responses to each OPM evaluation. In addition, OPM has directed the heads of agencies to continue to conduct general indepth reviews of personnel management. USGS will conduct evaluations at 9 locations in FY 1987; areas of emphasis will include classification accuracy, performance appraisals in relation to performance-based management, and compliance with merit selection procedures. Since personnel management evaluations are the principal vehicle used to conduct A-123 audits of personnel systems, three to five evaluations will focus on Bureauwide target areas, e.g., usage of excepted and temporary appointments; position management; and management usage of delegated personnel authorities such as approval of awards and training requests.

- Labor-Management Relations - Three of the Bureau's largest and most active unions are expected to request renegotiations of their basic contracts. These unions, along with the remaining eight unions recognized by the USGS, are also expected to request mid-term bargaining on OPM's pay for performance regulations. Extended impact and implementation bargaining sessions with three unions affected by reorganizations are anticipated. Finally, unions are expected to increase their efforts to organize elements of the USGS's field structure. This activity will require negotiation of ground rules for organizational campaigns, and possibly negotiations of additional basic contracts should the unions' organizational campaigns result in extending recognition to additional bargaining units.

- Employee Development - This program will receive increased emphasis by the Office of Personnel Management in FY 1987. OMB is redirecting the Training and Development (T&D) Program to strengthen T&D functions in the Federal Government and increase cost efficiency. During FY 1987, OPM will involve agencies in activities related to testing the application of: advanced technologies to the management of T&D; a career development system approach to Government career-fields; and a forecast model for training needs. OPM will also encourage greater use of high quality, cost efficient, private sector contractors. DOI will continue to pursue the development and implementation of the PAY/PERS Training Subsystem. USGS will be directly involved in integrating and applying these program and system changes.

- **Employee Relations Casework** - This functional area includes assistance to supervisors and employees relating to motivation, counseling, employee conduct, performance management, discipline, appeals, grievances, awards, and employee benefits such as injury compensation, retirement, health, and life insurance. Anticipated changes in employee benefits and retirement programs are expected to result in an increased workload as employees elect to retire or adjust their benefits coverages to cope with the changes. Management advisory services and employee counseling on performance management issues will continue to require significant expenditures of staff time. Grievance and appeal activity is expected to remain constant.

- **Recruitment and Placement** - Proposals to achieve greater efficiency and better utilization of staff involve extended and time-consuming advisory services and counseling with management and employees on regulatory and procedural requirements. At the same time, the recruitment and placement function must assure continued and vigorous compliance with programs mandated by law and regulations such as the Federal Equal Opportunity Recruitment Program, Affirmative Action Program for Handicapped and Disabled Veterans, Upward Mobility, and affirmative action, with emphasis on Presidential and Secretarial Initiatives for Historically Black Colleges and Universities. A relatively constant level of recruitment and placement activity is anticipated, since organizational consolidations and relocations continue to generate substantial need for advisory and placement services.

- **Personnel Management Departmental Information System** - Emphasis will be on the continued implementation and refinement of an interactive data base for the electronic input of personnel actions. This effort will provide for a more accurate and responsive method of personnel action processing, generation of processing statistics, and a tracking system. Parallel to this effort will be the systems administration, user training and implementation of the Bureau's Personnel Management Information System, and the continual development of additional data base to support management's requirements for personnel reports and data.

General Services and Office Support: The Headquarters Branch of Administrative Services and two regional general services offices provide support, advice, direction, and formulate policies and procedures in the areas of space management, safety, supply and property management, directives, paperwork management, and other administrative and office services activities. Specialized operating areas include administration of a comprehensive and fully developed administrative services program for the acquisition, utilization, and disposition of personal and real property; maintenance of property accountability records; control of supplies and equipment; warehousing; maintenance of equipment, duplicating, and other program support services; administration of a Bureauwide program of review, analysis, and implementation of directives and paperwork management improvements; development of policy guidance, coordination, and review of information for space management and acquisition at the field level; review and analysis of major organizational change proposals; transportation; and mail and messenger service.

Special attention will be directed to the following areas:

- Safety - Program internal controls will continue to receive emphasis through field evaluations and program plan reviews. Special emphasis will be placed on developing self-taught training programs to meet the requirements of OSHA and A-123 in a cost effective manner. Special efforts will be initiated to ensure compliance with all Environmental Protection Agency requirements for hazardous wastes at all field locations and to meet all new requirements created by recent Resource Conservation and Recovery Act revisions. Efforts to further reduce paperwork and improve data accuracy through use of available ADP systems will continue to receive top priority.

- Space Management - Emphasis on reducing the inventory of space to reduce costs and to improve the Bureau's utilization rate will continue in FY 1987. Attention will be focused on automating the space management records in the Bureau to improve the efficiency of operating the space management program and to streamline current labor-intensive billing procedures. Special emphasis will be directed at improving space planning through increased efforts to obtain advance notice of (1) lease expiration dates, (2) conditions forcing relocation of Bureau offices, and (3) funding considerations.

- Property Management - Efforts to improve and streamline the Bureau's property management system will continue to receive high priority. Internal controls will continue to be refined. Property management reviews will be conducted at regional property offices to assess compliance with policy and procedures. Special emphasis will be placed on improving contractor inventory records. Personal property system inputs and the number of items inventoried are expected to show some decline as a result of the anticipated decontrol of items valued at less than $50. Real property management will be emphasized consistent with the Federal Property Management Reform initiative to ensure that DOI Federal real property is managed as a national asset, used in the best interest of the taxpayer, and yet incorporates Departmental organizational program needs.

Procurement Activities: The Headquarters Branch of Procurement and Contracts and the two regional procurement offices administer the Geological Survey's procurement, contracts, grants, and cooperative agreement support activities. This support is essential to the effective accomplishment of the scientific, research, and technical projects and programs required to fulfill the mission of the Bureau. This involves the procurement of a wide range of complex, often unique research support services, and associated equipment. These activities encompass the entire spectrum of procurement policy and operations functions. They are designed to ensure the formulation and implementation of contract, grant, cooperative agreement, and purchasing practices and procedures that will produce effective, economical project results in compliance with applicable laws, regulations, and sound business decisions.

In FY 1987, priority emphasis will be given to revision of procurement policy, automation, and training administrative and technical personnel in contractual requirements and techniques.

- The Federal Acquisition Regulation (FAR) continuously undergoes rapid changes in response to legislation (such as Public Law 98-369, the Competition in

Contracting Act) and internal initiatives. FAR refinement will continue into FY 1987 and some additional training of procurement personnel will be required. Procurement policies will continue to be reviewed and changed, as appropriate, to conform with the new regulations.

- Automation initiatives will be continued to streamline the procurement process. The Geological Survey's procurement activities are monitored through the automated Procurement Management Information System (PMIS). Several continuing requirements impose significant development activity on this System. These include: the review of the System to determine if it is meeting the changing needs of the procurement community; the development and maintenance of special and recurring reports to assist managers in analyzing procurement workload priorities and areas of special interest; and the development and maintenance of reporting elements to the Federal Procurement Data System and the Interior Procurement Data System currently being revised. Electronic reporting to these Systems will improve the accuracy of the data.

- Continued attention will be directed to meeting and maintaining Warrant System qualification standards in FY 1987. Under the provisions of the Warrant System, the Geological Survey continues to foster a highly skilled, fully qualified, professional procurement staff.

All of the foregoing involve improvement initiatives which will be implemented in accordance with Reform 88 procurement objectives and efficiency goals.

Administrative Systems Management: The Branch of Administrative Systems Management coordinates the development of automated Bureauwide administrative information systems within the Geological Survey and manages the automated data processing (ADP) resources of the Administrative Division. Functional responsibilities for the Branch include the development of policy, standards, and procedures for Bureauwide administrative information systems and their associated data bases; ADP planning and performance monitoring; and, review and approval of all proposals for establishing, modifying, or accessing administrative systems hardware and software components. Developmental activities include requirements definition, systems analysis and design, programming implementation, training, maintenance, and production support of automated systems in the areas of personnel, procurement, property, space management, accounting and financial reporting.

In FY 1987, the Branch of Systems Management will continue and expand administrative systems improvements initiated in FY 1986 in order to position the Geological Survey to respond to the general Reform 88 initiatives of ADP modernization and procedural streamlining, and to allow effective response to opportunities for providing cross-servicing or otherwise participating in Departmental administrative improvement efforts. As an additional initiative, the Branch of Systems Management will direct resources toward improving the quality of information used by USGS managers relative to administrative activities. The major effort in this regard will be directed at streamlining Division operations through pilot implementation of automatic interfacing of administrative ADP systems and improvement in document storage technology. Successful completion of this pilot effort and the accompanying analyses will enable the Geological Survey to identify the benefits and costs of pursuing further Bureauwide improvements in administrative systems in FY 1988 and beyond. The proposed enhancements concentrate on facilitating the flow of administrative transactions through increased use of data base management and optical disk storage technologies. These technologies can provide the foundation for sharing data between the various administrative systems, reducing the cost of data entry, processing, and storage. A significant product of this sharing activity would be to supply useful management information to senior Bureau and Division officials. Interfacing administrative systems through improved data base management should reduce data entry costs, encourage development of common data formats, and increase the control and quality of data stored electronically while reducing physical storage requirements and associated costs. Laser optical disk storage may offer similar benefits for paper document and microform storage, minimizing redundant filing of records in multiple locations by providing a single centralized document repository permitting individual users to have near instantaneous access to archival information, and preserving file integrity.

Decrease for FY 1987

	FY 1987 Base	FY 1987 Estimate	Change
$	[illegible]	[illegible]	[illegible]
(FTE-T)	[illegible]	[illegible]	[illegible]

The proposed reduction is part of the overall savings associated with Bureauwide productivity improvement efforts. Savings will be realized, within the General Services program, through increased efficiency in the provision of office services support, such as mail and messenger service, duplicating services, and transportation. These savings will be accomplished through a variety of means, including automation of some recordkeeping activities, job restructuring, and anticipated economies due to Departmental initiatives to consolidate the provision of administrative services. The feasibility of providing some services under private sector contract will also be explored.

Distribution of Change by Object Class

The object class detail for the proposed [illegible] decrease is as follows:

	FTE-T	Amount
Personnel Compensation	-1	[illegible]
Personnel Benefits		[illegible]
Travel of persons		[illegible]
Transportation of things		[illegible]
Comm., Utilities & misc. charges		[illegible]
Printing & reproduction		[illegible]
Other services		[illegible]
Supplies		[illegible]
Equipment		[illegible]
Other Services		[illegible]
Total		[illegible]

[illegible]

ADMINISTRATIVE OPERATIONS
WORKLOAD SUMMARY

Workload Items	FY 1989 Actual	FY 1990 Estimate	FY 1991 Base	FY 1991 Estimate
Accounting Documents Processed	[illegible]	[illegible]	[illegible]	[illegible]
Financial Management System (Costs)	[illegible]	[illegible]	[illegible]	[illegible]
Employee Relations Case Work	[illegible]	[illegible]	[illegible]	[illegible]
Number of Positions Reviewed	[illegible]	[illegible]	[illegible]	[illegible]
Labor Relations Case Work	[illegible]	[illegible]	[illegible]	[illegible]
Vacancy Announcements Processed	[illegible]	[illegible]	[illegible]	[illegible]
Personnel Management Evaluations	[illegible]	[illegible]	[illegible]	[illegible]
Personnel Transactions Processed	[illegible]	[illegible]	[illegible]	[illegible]
Procurements Processed	[illegible]	[illegible]	[illegible]	[illegible]
Procurement Management System (Costs)	[illegible]	[illegible]	[illegible]	[illegible]
Property Management System (Costs)	[illegible]	[illegible]	[illegible]	[illegible]
Property Management System (Items)	[illegible]	[illegible]	[illegible]	[illegible]

Justification of Program and Performance

Activity: General Administration
Subactivity: Reimbursements to the Department of Labor

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Reimbursements to the Department of Labor	$	1638	1638	1638	1638	0
Total Requirements	$	1638	1638	1638	1638	0

Authorization

P.L. 86-767 Federal Employees Compensation Act Amendment of 1960
P.L. 96-499 Omnibus Reconciliation Act of 1980

Objective: This activity funds (1) the estimated reimbursement to the Bureau of Employees Compensation, Department of Labor, for payments made in FY 1985 for Geological Survey employees injured since December 1, 1976, and (2) a reimbursement to the Department of Labor for funds transferred to State governments for unemployment benefits paid to eligible individuals whose last job of record was with the Geological Survey. Any additional expenses will be borne by programs should they occur.

U.S. GEOLOGICAL SURVEY
Analysis by Subactivity

Activity: Facilities

(Dollars in thousands)

Subactivity	FY 1985 Actual B.A.	FY 1986 Approp. Enacted	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Increase or Decrease (-) 1987 Est. over 87 Base
National Center-SLUC	11329	11329	11329	12175	12175	0
National Center-Facilities Management	1720	2848	2238	2848	2848	0
TOTAL	13049	14177	13567	15023	15023	0

Justification of Program and Performance

Activity: Facilities

(Dollar Amounts in Thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Base	FY 1987 Estimate	Inc./Dec. from Base
Standard Level User Charge	$	11329		12175	12175	0
Facilities Management	$	2848		2848	2848	0
	FTE-T	44		44	44	0
Total Requirements	$	14177	13567	15023	15023	0
	FTE-T	44	44	44	44	0

Gramm-Rudman-Hollings Impact:

	FY 1986 Enacted	P.L.99-177 Reduction	FY 1986 Adjusted Approp.
$	14177	-610	13567

The reduction will be achieved, to the extent possible, by the curtailment, deferral, or cancellation of non-mandatory expenditures in the Facilities Management program for the acquisition of goods and services, such as training, equipment, supplies, discretionary facility modifications, and other contractual services. In the event that all possible reductions of non-mandatory expenditures are insufficient to meet the reduction target, the cost of the remaining mandatory expenses will be borne by the program activities that generate them.

Authorization

P.L. 92-313 Public Buildings Amendment Act of 1972

Objective: To serve as the primary policy focal point in the Geological Survey for facilities management; to provide adequate and safe work space and facilities that will contribute to the productivity and efficiency of the Bureau and its employees in meeting the current and future goals and objectives of the Survey's mission; to maintain short- and long-range programs to abate unsafe and unhealthy working conditions, correct deterioration, malfunction and obsolescence in facilities; and provide special support services for the National Center complex at Reston, Virginia, and major field centers.

Base Program:

National Center Support

Finance space costs at the National Center complex which include:

- $12,175,000 for GSA's Standard Level User Charge (SLUC) for the normal 40-hour, 5-day work week.
- Support services for the Geological Survey program operations with approximately 3,000 employees located in the Reston, Virginia, complex. Such services include: mail and telephone operations, property management, space assignment and control, parking, operation of self-service store, duplicating and printing services, self-protection, safety, and selected supply and warehousing operations.
- Special building operating costs for the National Center, not included in SLUC, such as guard services, overtime utilities, and alterations. In the event these costs exceed available funds, they will be borne by the program activities generating the expense.

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Surveys, Investigations, and Research

Direct Obligations:	FY 1987 Base FTE/T	FY 1987 Base Amount	FY 1987 Estimate FTE/T	FY 1987 Estimate Amount	Inc.(+) or Dec.(-) FTE/T	Inc.(+) or Dec.(-) Amount
11.0 Personnel Compensation:						
11.1 Full-time permanent		201094		199317		-1777
11.3 Other than full-time perm.		25264		25041		-223
11.5 Other personnel comp.		4974		4974		--
Total pers. comp.	7593	231332	7525	229332	-68	-2000
12.1 Personnel benefits		29970		29711		-259
13.0 Benefits for former pers.		802		802		--
21.0 Travel & trans of persons		11738		10565		-1173
22.0 Transportation of things		4263		3183		-1080
23.1 SLUC		31620		31620		--
23.2 Rental payments to others		897		897		--
23.3 Comm., Util. & misc. charges		12792		9518		-3274
24.0 Printing and Reproduction		3467		2588		-879
25.0 Other services		52341		39355		-12986
26.0 Supplies & materials		20192		15076		-5116
31.0 Equipment		20435		15258		-5177
32.0 Lands and structures		23		17		-6
41.0 Grants, subsidies, and contrib.		12320		7567		-4753
42.0 Insurance claims & indemnities		16		11		-5
Total requirements		432208		395500		-36708

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Surveys, Investigations, and Research

Reimbursable Obligations:	FY 1987 Base		FY 1987 Estimate		Inc.(+) or Dec.(-)	
	FTE/T	Amount	FTE/T	Amount	FTE/T	Amount
11.0 Personnel Compensation:						
11.1 Full-time permanent		59591		59139		-452
11.3 Other than full-time perm.		7486		7622		136
11.5 Other personnel comp.		1467		1474		7
Total pers. comp.	2251	68544	2241	68235	-10	-309
12.1 Personnel benefits		8880		8880		--
13.0 Benefits for former pers.		237		237		--
21.0 Travel & trans of persons		6294		6294		--
22.0 Transportation of things		2274		2165		-109
23.1 SLUC		9977		9718		-259
23.2 Rental payments to others		624		514		-110
23.3 Comm., Util. & misc. charges		6866		6866		--
24.0 Printing and Reproduction		1863		1863		--
25.0 Other services		46173		40765		-5408
26.0 Supplies & materials		11846		10616		-1230
31.0 Equipment		12757		11433		-1324
32.0 Lands and structures		15		15		--
41.0 Grants, subsidies, and contrib.		3175		2918		-257
42.0 Insurance claims & indemnities		9		9		--
Total requirements		179534		170528		-9006

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SURVEYS, INVESTIGATIONS, AND RESEARCH
Program and Financing (in thousands of dollars)

A-11-32A

14-0804-0-1-306		1985 Actual	1986 Estimate	1987 Estimate
	Program by activities:			
	Direct program:			
00.01	National mapping, geography and surveys	85,469	87,897	83,427
00.02	Geologic and mineral resource surveys and mapping	169,595	173,014	159,016
00.03	Water resources investigations	133,647	141,847	124,678
00.04	General administration	15,244	13,422	13,356
00.05	Facilities	13,049	14,177	15,023
	Total, direct program	417,004	430,357	395,500
	Reimbursable program a/ b/	187,066	179,534	170,528
10.00	Total obligations	604,070	609,891	566,028
	Financing:			
	Offsetting collections from:			
11.00	Federal funds	-101,626	-96,109	-87,017
14.00	Non-Federal sources	-85,440	-83,425	-83,511
21.40	Unobligated balance available, start of year	--	1,155	-167
22.40	Unobligated balance transferred, net	-1,795	--	--
24.40	Unobligated balance available, end of year	1,155	167	167
25.00	Unobligated balance lapsing	4	--	--
39.00	**Budget authority**	416,368	429,369	395,500

a/ Includes map receipts of $7.1M in FY 1985, $7.4M in FY 1986 and $7.8M in FY 1987.

b/ Reimbursements for FY 86 and FY 87 have been revised to reflect best estimates.

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SURVEYS, INVESTIGATIONS, AND RESEARCH
Program and Financing (in thousands of dollars)

14-0804-0-1-306		1985 Actual	1986 Estimate	1987 Estimate
Budget authority:				
	Current:			
40.00	Appropriation	415,446	431,961	395,500
40.00	Reduction pursuant to P.L. 98-473	--	-2,592	--
42.00	Transferred from other accounts	922	--	--
43.00	**Appropriation (adjusted)**	416,368	429,369	395,500
	Relation of obligations to outlays:			
71.00	Obligations incurred, net	417,004	430,357	395,500
72.40	Obligated balance, start of year	61,198	25,943	15,289
73.40	Obligated balance transferred, net	3,115	--	--
74.40	Obligated balance, end of year	-25,943	-15,289	-17,587
77.00	Adjustments in expired accounts	-9,945	-77	--
90.00	Outlays	445,429	440,934	393,202

A-11-34A

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SURVEYS, INVESTIGATIONS, AND RESEARCH
DIRECT PROGRAM
OBJECT CLASSIFICATION (in thousands of dollars)

14-0804-0-1-306		1985 Actual	1986 Estimate	1987 Estimate
Personnel compensation:				
11.1	Full-time permanent	201,488	201,094	199,317
11.3	Other than full-time permanent	25,314	25,264	25,041
11.5	Other personnel compensation	4,974	4,974	4,974
11.9	Total personnel compensation	231,776	231,332	229,332
12.1	Personnel benefits: Civilian	30,027	29,970	29,711
13.0	Benefits for former personnel	802	802	802
21.0	Travel and transportation of persons	10,554	11,738	10,565
22.0	Transportation of things	3,833	4,263	3,183
23.1	Standard level user charges	27,685	27,815	31,620
23.2	Rental payments to others	1,041	1,158	897
23.3	Comm., util., and misc. charges	11,502	12,792	9,518
24.0	Printing and reproduction	3,117	3,467	2,588
25.0	Other services	51,723	54,034	39,055
26.0	Supplies and materials	18,155	20,192	15,076
31.0	Equipment	18,374	20,435	15,258
32.0	Lands and structures	21	23	17
41.0	Grants, subsidies, and contributions	8,380	12,320	7,867
42.0	Insurance claims and idemnities	14	16	11
	Total direct obligations	417,004	430,357	395,500

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SURVEYS, INVESTIGATIONS, AND RESEARCH
REIMBURSABLE PROGRAM
OBJECT CLASSIFICATION (in thousands of dollars)

14-0804-0-1-306		1985 Actual	1986 Estimate	1987 Estimate
Personnel compensation:				
11.1	Full-time permanent	59,406	59,591	59,139
11.3	Other than full-time permanent	7,463	7,486	7,622
11.5	Other personnel compensation	1,467	1,467	1,474
11.9	Total personnel compensation	68,336	68,544	68,235
12.1	Personnel benefits: Civilian	8,853	8,880	8,880
13.0	Benefits for former personnel	237	237	237
21.0	Travel and transportation of persons	6,938	6,294	6,294
22.0	Transportation of things	2,507	2,274	2,165
23.1	Standard level user charges	9,931	9,977	9,718
23.2	Rental payments to others	688	624	514
23.3	Comm., util., and misc. charges	7,368	6,866	6,866
24.0	Printing and reproduction	2,053	1,863	1,863
25.0	Other services	49,860	46,173	40,765
26.0	Supplies and materials	12,792	11,846	10,616
31.0	Equipment	13,776	12,757	11,433
32.0	Lands and structures	17	15	15
41.0	Grants, subsidies, and contributions	3,500	3,175	2,918
42.0	Insurance claims and idemnities	10	9	9
	Total reimbursable obligations	187,066	179,534	170,528
99.0	Total obligations, Surveys, Investigations, & Research	604,070	609,891	566,028

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SUMMARY OF BUDGET AUTHORITY AND OUTLAYS

	FY 1985 Actual	FY1986 Estimate	FY 1987 Estimate
Enacted/requested:			
Budget authority........................	416368	431961	395500
Outlays..................................	445429	443526	393202
Reduction pursuant to P.L. 99-190			
Budget authority........................	---	-2592	---
Outlays..................................	---	-2592	---
Reduction pursuant to P.L. 99-177			
Budget authority........................	---	-18463	---
Outlays..................................	---	-20960	-1046
Total:			
Budget authority........................	416368	410906	395500
Outlays..................................	445429	419974	392156

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SURVEYS, INVESTIGATIONS, AND RESEARCH
PERSONNEL SUMMARY

A-11-34A

14-0804-0-1-306	1985 Actual	1986 Estimate	1987 Estimate
Direct			
Total number of full-time permanent positions	8,404	8,471	8,404
Total compensable workyears:			
Full-time equivalent employment	7,607	7,580	7,320
Full-time equivalent of overtime and holiday hours	333	333	333
Average ES Salary	$65,349	$65,349	$65,349
Average GS Grade	10.09	10.49	10.09
Average GS Salary	$31,530	$31,530	$31,530
Reimbursable			
Total number of full-time permanent positions	1,898	1,871	1,863
Total compensable workyears:			
Full-time equivalent employment	[illegible]	[illegible]	[illegible]
Full-time equivalent of overtime and holiday hours	33	30	30
Average GS Grade	[illegible]	[illegible]	[illegible]
Average GS Salary	[illegible]	[illegible]	[illegible]

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
[illegible]
Program and Financing (in thousands of dollars)

[illegible]

[illegible]	1985 Actual	1986 Estimate	1987 Estimate
Program by activities:			
10.00 Total obligations (object class [illegible])	[illegible]	[illegible]	—
Financing:			
17.00 Recovery of prior year obligations	[illegible]	—	—
21.40 Unobligated balance available, start of year	—	[illegible]	—
24.40 Unobligated balance available, end of year	[illegible]	—	—
40.00 Budget authority (appropriation)	—	—	—
Relation of obligations to outlays:			
71.00 Obligations incurred, net	[illegible]	[illegible]	—
72.40 Obligated balance, start of year	[illegible]	[illegible]	—
74.40 Obligated balance, end of year	[illegible]	—	—
78.00 Adjustments in unexpired accounts	[illegible]	—	—
90.00 Outlays	[illegible]	[illegible]	—

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
EXPLORATION OF NATIONAL PETROLEUM RESERVE IN ALASKA
Program and Financing (in thousands of dollars)

14-0805-0-1-271		1985 Actual	1986 Estimate	1987 Estimate
	Program by activities:			
00.01	Evaluation and assessment of National Petroleum Reserve in Alaska	801	885	--
00.02	Barrow area gas operation, exploration and development	--	150	--
10.00	Total obligations	801	1,035	--
	Financing:			
17.00	Recovery of prior year obligations	-83	--	--
21.40	Unobligated balance available, start of year	-1,753	-1,035	--
24.40	Unobligated balance available, end of year	1,035	--	--
40.00	**Budget authority**	--	--	--
	Relation of obligations to outlay:			
71.00	Obligations, incurred, net	801	1,035	--
72.40	Obligated balance, start of year	8,168	2,924	--
74.40	Obligated balance, end of year	-2,924	--	--
78.00	Adjustments to unexpired accounts	-83	--	--
90.00	**Outlays**	5,962	3,959	--

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
EXPLORATION OF NATIONAL PETROLEUM RESERVE IN ALASKA
OBJECT CLASSIFICATION (in thousands of dollars)

14-0805-0-1-271		1985 Actual	1986 Estimate	1987 Estimate
Personnel compensation:				
11.1	Full-time permanent	239	201	--
11.3	Other than full-time permanent	15	24	--
11.5	Other personnel compensation	5	5	--
11.9	Total personnel compensation	259	230	--
12.1	Personnel benefits: Civilian	47	48	--
21.0	Travel and transportation of persons	52	30	--
23.1	Standard level user charges	34	34	--
23.3	Comm., util., and misc. charges	21	8	--
24.0	Printing and reproduction	3	1	--
25.0	Other services	382	682	--
26.0	Supplies and materials	3	2	--
99.0	Total obligations	801	1,035	--

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
EXPLORATION OF NATIONAL PETROLEUM RESERVE IN ALASKA
PERSONNEL SUMMARY

14-0805-0-1-271	1985 Actual	1986 Estimate	1987 Estimate
Total number of full-time permanent positions	4	4	--
Total compensable workyears:			
Full-time equivalent employment	4	4	--
Average GS Grade	10.09	10.09	--
Average GS Salary	$31,530	$31,530	--

Appropriation Summary Statement

Appropriation: Contributed Funds

Funds in this account, which was established in FY 1983, are provided by States, local governments, and private organizations. This appropriation, a permanent, indefinite, trust fund appropriation, makes these funds available to the Bureau to perform the work desired by the contributor and the Bureau. Research and development, information collection and analysis, and other technical activities and services are undertaken when such activities are of mutual interest and benefit and assist the Bureau in accomplishing its mandated purposes. During FY 1984 and FY 1985 contributions were received as part of a project to determine and interpret the compositional and geologic parameters that can be related to the quality variations of a coalbed.

Summary of Requirements

(Dollar amounts in thousands)

Appropriation: Contributed Funds

	FTE/T	Amount
Appropriation, 1986	--	500
Adjustments to base	--	--
1987 Base Budget	--	500

	1985 Actual		1986 Approp. Enacted to Date		1987 Base		1987 Estimate		Inc. or Dec. over 1987 Base	
	FTE/T	Amount	FTE/T	Amount	FTE/T	Amount	FTE/T	Amount	FTE/T	Amount
Contributed Funds	1	50	--	500	--	500	--	500	--	--
Total Requirements	1	50	--	500	--	500	--	500	--	--

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Contributed Funds

Direct Obligations:		FY 1987 Base		FY 1987 Estimate		Inc.(+) or Dec.(-)	
		FTE/T	Amount	FTE/T	Amount	FTE/T	Amount
11.0	Personnel Compensation:						
11.1	Full-time permanent		--		--		--
11.3	Other than full-time perm.		--		--		--
11.5	Other personnel comp.		--		--		--
	Total pers. comp.	--	--	--	--	--	--
12.1	Personnel benefits		--		--		--
13.0	Benefits for former pers.		--		--		--
21.0	Travel & trans of persons		--		--		--
22.0	Transportation of things		--		--		--
23.1	SLUC		--		--		--
23.2	Rental payments to others		--		--		--
23.3	Comm., Util. & misc. charges		--		--		--
24.0	Printing and Reproduction		--		--		--
25.0	Other services		500		500		--
26.0	Supplies & materials		--		--		--
31.0	Equipment		--		--		--
32.0	Lands and structures		--		--		--
41.0	Grants, subsidies, and contrib.		--		--		--
42.0	Insurance claims & indemnities		--		--		--
	Total requirements		500		500		--

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONTRIBUTED FUNDS
Program and Financing (in thousands of dollars)

14-8562-0-7-306	1985 Actual	1986 Estimate	1987 Estimate
Program by activities:			
10.00 Total Obligations	39	511	500
Financing:			
21.40 Unobligated balance available, start of year	--	-11	--
24.40 Unobligated balance available, end of year	11	--	--
60.00 **Budget authority** (appropriation) (permanent, indefinite)	50	500	500
Relation of obligations to outlays:			
71.00 Obligations incurred, net	39	511	500
72.40 Obligated balance, start of year	--	40	--
74.40 Obligated balance, end of year	-40	--	--
90.00 Outlays	-1	551	500

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONTRIBUTED FUNDS
OBJECT CLASSIFICATION (in thousands of dollars)

14-8562-0-7-306		1985 Actual	1986 Estimate	1987 Estimate
	Personnel compensation:			
11.1	Full-time permanent	22	--	--
11.5	Other personnel compensation	1	--	--
11.9	Total personnel compensation	23	--	--
12.1	Personnel benefits: Civilian	2	--	--
21.0	Travel and transportation of persons	1	--	--
22.0	Transportation of things	1	--	--
23.3	Comm., util., and misc. charges	2	--	--
25.0	Other services	6	511	500
26.0	Supplies and materials	2	--	--
31.0	Equipment	2	--	--
99.0	Total obligations	39	511	500

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONTRIBUTED FUNDS
PERSONNEL SUMMARY

14-8562-0-7-306	1985 Actual	1986 Estimate	1987 Estimate
Total number of full-time permanent positions	1	--	--
Total compensable workyears: Full-time equivalent employment	1	--	--
Average GS Grade	10.09	--	--
Average GS Salary	$31,530	--	--

Funding of Geological Survey Programs (Obligations)

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
National Mapping, Geography and Surveys:			
Direct appropriation	85,468,866	87,897,000	83,427,000
Map Receipts-Non-Federal Sources	7,108,006	7,400,000	7,800,000
States, counties, and municipalities-			
Matched	1,833,061	1,950,000	1,700,000
Unmatched	104,354	72,000	80,000
Sale of Maps, Photos & Digital Products - non-Federal	2,110,343	1,945,000	1,995,000
Miscellaneous non-Federal sources	232,081	417,000	195,000
Bureau of Indian Affairs	373,622	140,000	100,000
Bureau of Land Management	659,058	414,000	195,000
Bureau of Reclamation	63,025	--	--
Department of Agriculture	2,404,773	1,796,000	1,104,000
Department of Commerce	617,270	104,000	50,000
Department of Defense:			
Military	4,905,454	2,089,000	1,710,000
Civilian	--	--	--
Department of Energy	100,072	71,000	50,000
Department of Transportation	46,287	--	--
Fish and Wildlife Service	138,800	--	--
International Boundary Commission	102,307	--	20,000
National Aeronautics & Space Admin.	--	50,000	20,000
National Oceanic & Atmospheric Admin.	6,481,016	6,743,000	6,735,000
National Park Service	75,000	--	--
National Science Foundation	159,434	208,000	150,000
Office of Surface Mining	90,000	--	--
Tennessee Valley Authority	25,000	25,000	25,000
Treasury	85,000	85,000	50,000
Training and Special Projects	133,124	138,000	90,000
Sale of Maps, Photos, Reproduction & Digital - Federal	1,557,381	1,570,000	1,105,000
Landsat Affiliates (EOSAT)	--	5,150,000	5,150,000
Miscellaneous Federal Agencies	281,867	202,000	196,000
Total	115,155,201	118,466,000	111,947,000
Geologic and Mineral Resource Surveys and Mapping:			
Direct appropriation	169,761,710	173,014,000	159,016,000
States, counties and municipalities:			
Unmatched	1,016,190	700,000	700,000
Kingdom of Saudia Arabia	12,114,893	8,000,000	8,000,000
Miscellaneous non-Federal sources	1,056,860	1,592,000	1,592,000
Agency for International Development	2,458,004	1,410,000	1,410,000
Bureau of Indian Affairs	4,207,987	3,885,000	3,885,000
Bureau of Land Management	863,319	452,000	452,000
Bureau of Mines	53,865	--	--
Bureau of Reclamation	607,463	500,000	500,000
Central Intelligence Agency	179,825	150,000	150,000

Funding of Geological Survey Programs (Obligations)

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
Department of Defense:			
Military	7,994,354	3,331,000	3,331,000
Civilian	565,264	222,000	222,000
Department of Energy	7,908,021	8,820,000	8,820,000
Department of State	130,938	20,000	20,000
Environmental Protection Agency	11,000	26,000	26,000
Federal Emergency Management Agency	174,013	134,000	134,000
Fish and Wildlife Service	753,398	60,000	60,000
Minerals Management Service	704,555	364,000	364,000
National Aeronautics and Space Admin.	3,979,233	3,945,000	3,945,000
National Oceanic & Atmospheric Admin.	311,301	497,000	497,000
National Park Service	140,957	33,000	33,000
National Science Foundation	82,665	160,000	160,000
Nuclear Regulatory Commission	1,235,410	1,415,000	1,415,000
Office of the Secretary	17,000	--	--
Miscellaneous Federal Agencies	414,503	459,000	459,000
Total	216,742,728	209,189,000	195,191,000
Water Resources Investigations			
Direct appropriation	132,841,035	140,859,000	124,678,000
Prior year's unobligated balance	806,944	988,000	--
States, counties, and municipalities:			
Matched	51,679,000	52,324,000	52,859,000
Unmatched	4,821,188	5,500,000	5,000,000
Permittees and licensees of the Federal Energy Regulatory Comm.	1,981,292	2,000,000	1,800,000
Kingdom of Saudia Arabia	1,027,870	1,100,000	1,400,000
Miscellaneous non-Federal sources	317,414	325,000	290,000
Agency for Int'l Development	97,145	100,000	165,000
Bonneville Power Administration	131,731	130,000	120,000
Bureau of Indian Affairs	948,695	1,000,000	1,000,000
Bureau of Land Management	1,377,481	1,400,000	1,000,000
Bureau of Reclamation	7,839,861	8,000,000	7,000,000
Department of Agriculture	661,488	675,000	650,000
Department of Defense:			
Military	2,309,384	2,400,000	3,500,000
Civilian	16,108,600	18,000,000	15,000,000
Department of Energy	7,884,867	8,000,000	8,000,000
Department of State	488,003	500,000	500,000
Department of Transportation	411,704	425,000	400,000
Environmental Protection Agency	1,464,894	1,500,000	1,300,000
Federal Emergency Management Agency	3,421,668	3,500,000	500,000
National Oceanic & Atmospheric Admin.	83,454	90,000	75,000
National Park Service	905,455	900,000	815,000
Tennessee Valley Authority	222,386	225,000	150,000
Miscellaneous Federal Agencies	539,189	550,000	163,000
Total	238,370,748	250,491,000	226,365,000

Funding of Geological Survey Programs (Obligations)

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
General Administration:			
Direct appropriation	15,244,000	13,422,000	13,356,000
Miscellaneous Federal Agencies	109,715	1,000	1,000
Total	15,353,715	13,423,000	13,357,000
Facilities:			
Direct appropriation	13,049,000	14,177,000	15,023,000
Minerals Management Service	39,726	50,000	50,000
Total	13,088,726	14,227,000	15,073,000
Misc. Services to other accounts:			
Miscellaneous non-Federal sources	37,615	100,000	100,000
Computer services to Federal Agencies	5,882,150	4,391,000	4,391,000
Miscellaneous Federal Agencies	94,781	104,000	104,000
Total	6,014,546	4,595,000	4,595,000
Contributed Funds:			
Indefinite appropriation	39,000	511,000	500,000
Impress Fund:			
Cash Advance	(167,000)	--	--
Summary:			
Surveys, Investigations, & Research:			
Direct appropriation:			
Current	416,364,611	429,369,000	395,500,000
Indefinite appropriations	39,000	511,000	500,000
Prior year's unobligated balance	806,944	988,000	--
Cash Advance	(167,000)	--	--
States, counties and municipalities	59,453,793	60,546,000	60,339,000
Other Non-Federal sources	18,878,368	15,479,000	15,372,000
Map Receipts-Non-Federal Sources	7,108,006	7,400,000	7,800,000
Other Federal agencies	102,113,942	96,609,000	87,517,000
Total - SIR	604,597,664	610,902,000	567,028,000
National Petroleum Reserve in Alaska:			
Direct appropriation:			
Prior year's	801,000	1,035,000	--
Barrow Area Gas			
Direct appropriation:			
Prior year's	37,000	42,000	--
TOTAL - Geological Survey	605,435,664	611,979,000	567,028,000

Authorization for Purchase of 14 Passenger Motor Vehicles, are for replacement only

The vehicles requested are used to transfer men and equipment over all types of roads and terrain and in all kinds of weather, in the conduct of the field work of the Geological Survey. These vehicles must provide dependable service at all times, since a great deal of the transportation required is in areas where repair services are not available. Field use tends to shorten the efficient life of a vehicle.

The 14 vehicles to be replaced, as shown below, will meet or exceed the age or mileage replacement standards prescribed by the General Services Administration, and can no longer give dependable and economical service. The effective use of interagency motor pools, where location and equipment permit, has been carefully considered in estimating these requirements.

	Sedans	Station Wagons	Total
Replacements based on			
Mileage........................	--	--	--
Age and mileage................	6	8	14
Additions:	--	--	--
TOTAL......................	6	8	14
Total passenger vehicles owned by Geological Survey...............	31	46	77

DEPARTMENT OF THE INTERIOR

FY 1987 Budget for Consulting Services

Bureau: Geological Survey

Appropriation Account Title/ Iden. Code No.	Amount Requested in 1987 ($000)	Program Requiring Services	Description of Need for Services
Surveys, Investigations and Research (14-0804-0-1-306)	2	Denver Reactor	Three faculty members from universities with reputable nuclear engineering departments are required by the Nuclear Regulatory Commission to perform periodic reviews of the Denver reactor.
Bureau Total.......	2		

ADMINISTRATIVE PROVISIONS

The amount appropriated for the Geological Survey shall be available for purchase of not to exceed [16] *14* passenger motor vehicles, for replacement only; reimbursement to the General Services Administration for security guard services; contracting for the furnishing of topographic maps and for the making of geophysical or other specialized surveys when it is administratively determined that such procedures are in the public interest; construction and maintenance of necessary buildings and appurtenant facilities; acquisition of lands for observation wells; expenses of the United States National Committee on Geology; and payment of compensation and expenses of persons on the rolls of the Geological Survey appointed, as authorized by law, to represent the United States in the negotiation and administration of interstate compacts: *Provided*, That appropriations herein made shall be available for paying costs incidental to the utilization of services contributed by individuals who serve without compensation as volunteers in aid of work of the Geological Survey, and that within appropriations herein provided, Geological Survey officials may authorize either direct procurement of or reimbursement for expenses incidental to the effective use of volunteers such as, but not limited to, training, transportation, lodging, subsistence, equipment, and supplies: *Provided further*, That provision for such expenses or services is in accord with volunteer or cooperative agreements made with such individuals, private organizations, educational institutions, or State or local [governments.] *government: Provided further, That activities funded by this account may be accomplished through the use of contracts, grants, or cooperative agreements as defined in Public Law 95-224. (Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)*

U.S. Geological Survey

Justification of Proposed Language Change

Administrative Provisions

government: Provided further, That activities funded by this account may be accomplished through the use of contracts, grants, or cooperative agreements as defined in Public Law 95-224.

The enactment of Public Law 95-224 (Federal Grant and Cooperative Agreement Act of 1977) provided for a Governmentwide definition of the terms contract, grant, and cooperative agreement. Although the Organic Act (43 U.S.C. 31(a)) provides authority to award grants and cooperative agreements, since it precedes the Federal Grant and Cooperative Agreement Act, the appropriations language does not specifically reference grants and cooperative agreements. The addition of the proposed language will provide consistent terminology and clarify and reconfirm the Geological Survey's authority for grants and cooperative agreements.

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY
Appropriation: Surveys, Investigations, and Research

ADMINISTRATIVE PROVISIONS

1. The amount appropriated for the Geological Survey shall be available for purchase of not to exceed 16 passenger motor vehicles, for replacement only;

31 U.S.C. 638a(a)(b)

31 U.S.C. 638a(a) provides that, "Unless specifically authorized by the appropriation concerned or other law, no appropriation shall be expended to purchase or hire passenger motor vehicles for any branch of the Government. ..."

31 U.S.C. 638a(b) provides that, "Excepting appropriations for the military and Naval Establishments, no appropriation shall be available for the purchase, maintenance, or operation of any aircraft unless specific authority for the purchase, maintenance, or operation thereof has been or is provided in such appropriation."

2. reimbursement to the General Services Administration for security guard services, contracting for the furnishing of topographic maps and for the making of geophysical or other specialized surveys when it is administratively determined that such procedures are in the public interest;

No specific authority

These provisions are required by reason of rulings of the Comptroller General that specific authority is required for reimbursing the General Services Administration for guard services (B-87255); and for contracting with private persons for the performance of duties with which the agency is specifically charged (15 Comp. Gen. 951).

3. construction and maintenance of necessary buildings and appurtenant facilities;

No specific authority

The Organic Act of 1879, establishing the Geological Survey and providing for "...examination of the geological structure, mineral resources, and products of the national domain" (43 U.S.C. 31) is general authorization for construction of special-purpose laboratory buildings. Specific authorization by the Congressional committees on public works is not needed because of the highly specialized purposes of the building. 40 U.S.C. 612: "The term 'public building' means any building ... which is generally suitable for office or storage space ... but shall not include any such buildings and construction projects: ... (E) on or used in connection with ... or for nuclear production, research, or development projects."

41 U.S.C. 12: "No contract shall be entered into for the erection, repair, or furnishing of any public building ... which shall bind the government to pay a larger sum of money than the amount in the Treasury appropriated for the specific purpose."

4. acquisition of lands for observation wells;

43 U.S.C. 36(b)

43 U.S.C. 36(b) provides that, "The Secretary of the Interior may, on behalf of the United States and for the use by the Geological Survey in gaging streams and underground water resources, acquire lands by donation or when funds have been appropriated by Congress by purchase or condemnation. ..."

5. expenses of the U.S. National Committee on Geology;

43 U.S.C. 31

43 U.S.C. 31 participation in and payment of expenses of the U.S. National Committee on Geology is a proper and necessary function of the Geological Survey, and so is authorized by the Survey's Organic Act of March 3, 1879, 43 U.S.C. 31. This Act provides that, "...The Director of the Geological Survey, which office is established, under the Interior Department, shall be appointed by the President by and with the advice and consent of the Senate. This officer shall have the direction of the Geological Survey, and the classification of the public lands and examination of the geological structure, mineral resources, and products of the national domain. ..."

6. and payment of compensation and expenses of persons on the rolls of the Geological Survey appointed, as authorized by law, to represent the United States in the negotiation and administration of interstate compacts.

66 Stat. 453

The above language first appeared in the Appropriation Act for FY 1953, P.L. 82-470(66 Stat. 453), and has been repeated in each Act since that date. Article I, Section 10, paragraph 3, of the United States Constitution provides that, No State shall, without the consent of Congress, lay any duty on tonnage, keep troops, or ships of war in time of peace, enter into any agreement or compact with another State, or with a foreign power, or engage in war, unless actually invaded, or in such imminent danger as will not admit or delay." (emphasis supplied)

Thus each interstate compact must be approved by the Congress and signed by the President. The Public Law approving each interstate compact represents the authorizing legislation.

7. Provided further, That appropriations herein made shall be available for paying costs incidental to the utilization of services contributed by individuals who serve without compensation as volunteers in aid of work of the Bureau and that within appropriations herein provided, Bureau officials may authorize either direct procurement of or reimbursement for expenses incidental to the effective use of volunteers such as, but not limited to, training, transportation, lodgings, subsistence, equipment, and supplies.

   Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.

8. Provided further, That provision for such expenses or services is in accord with volunteer or cooperative agreements made with such individuals, private organizations, educational institutions, or State or local governments.

   Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.

ALLOCATIONS RECEIVED FROM OTHER ACCOUNTS

Note -- Obligations incurred under allocations from other accounts are included in the schedules of the parent appropriation as follows:

Department of State:

"American sections, international commissions."

	FY 1985	FY 1986	FY 1987
Funds	$ 488,003	$ 500,000	$ 500,000
Full-time equivalent personnel:			
Permanent	11	11	11
Total	11	11	11

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONSOLIDATED SCHEDULE OF PERMANENT POSITIONS PAID FROM FUNDS AVAILABLE TO THE GEOLOGICAL SURVEY

GRADE	1985 Actual	1986 Estimate	1987 Estimate
Executive Level V	1	1	1
Subtotal	1	1	1
ES-6	2	2	2
ES-5	5	5	5
ES-4	30	30	30
ES-3	9	9	9
ES-2	4	4	4
ES-1	1	1	1
Subtotal	51	51	51
GS-18	--	--	--
GS-17	1	1	1
GS-16	6	6	6
GS/GM-15	495	493	489
GS/GM-14	643	641	636
GS/GM-13	909	906	898
GS-12	1,196	1,192	1,182
GS-11	1,297	1,293	1,282
GS-10	166	165	164
GS-9	1,063	1,060	1,051
GS-8	232	231	229
GS-7	697	695	689
GS-6	541	539	535
GS-5	496	494	490
GS-4	255	254	252
GS-3	94	94	93
GS-2	38	38	38
GS-1	1	1	1
Subtotal	8,130	8,103	8,036

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONSOLIDATED SCHEDULE OF PERMANENT POSITIONS PAID FROM FUNDS AVAILABLE TO THE GEOLOGICAL SURVEY

	1985 Actual	1986 Estimate	1987 Estimate
Grades established by the Administrator, Agency for International Development: (75 Stat. 450)			
FC-13	1	1	1
FC-12	6	6	6
FC-11	11	11	11
FC-10	8	8	8
FC-9	6	6	6
FC-8	2	2	2
Subtotal	34	34	34
Ungraded	170	168	166
Total permanent positions	8,385	8,357	8,288
Unfilled positions, end of year	-20	--	--
Total permanent employment, end of year	8,366	8,357	8,288
Positions by Fund:			
SIR	6,484	6,471	6,414
NPRA	4	4	--
Barrow Gas	--	--	--
Reimbursements	1,866	1,871	1,863
Contributed Fulnds	1	--	--
Allocation Accounts	11	11	11
TOTAL	8,366	8,357	8,288
Worker-Trainee Opportunity Program	(10)		

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUDGET JUSTIFICATIONS, F. Y. 1987

March 3, 1849

NOTICE: These budget justifications are prepared for the Interior and Related Agencies Appropriations Subcommittees. Approval for release of the justifications prior to their printing in the public record of the Subcommittee hearings may be obtained from the Subcommittees through the Office of Budget of the Department of the Interior.

MINERALS MANAGEMENT SERVICE

DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
Fiscal Year 1987 Budget

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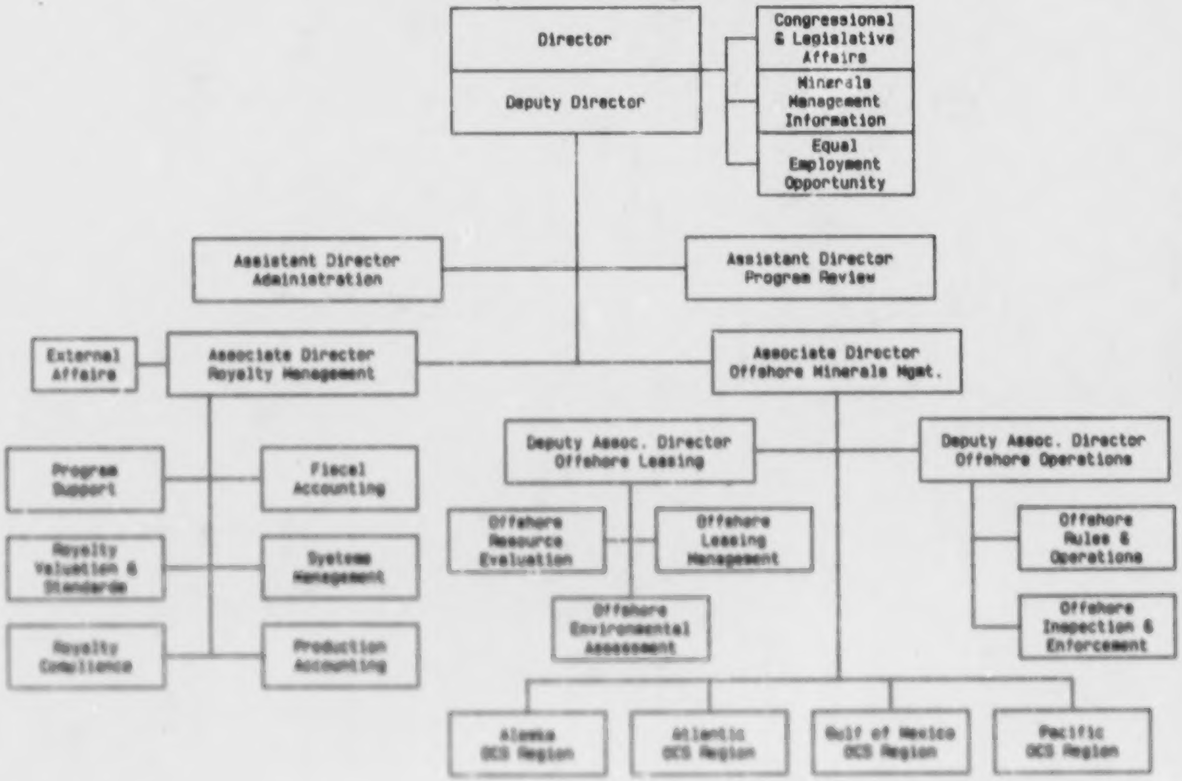
MINERALS MANAGEMENT SERVICE


Director
Deputy Director
Congressional & Legislative Affairs
Minerals Management Information
Equal Employment Opportunity
Assistant Director Administration
Assistant Director Program Review
External Affairs
Associate Director Royalty Management
Associate Director Offshore Minerals Mgmt.
Program Support
Fiscal Accounting
Royalty Valuation & Standards
Systems Management
Royalty Compliance
Production Accounting
Deputy Assoc. Director Offshore Leasing
Deputy Assoc. Director Offshore Operations
Offshore Resource Evaluation
Offshore Leasing Management
Offshore Environmental Assessment
Offshore Rules & Operations
Offshore Inspection & Enforcement
Alaska OCS Region
Atlantic OCS Region
Gulf of Mexico OCS Region
Pacific OCS Region

GENERAL STATEMENT

The Minerals Management Service (MMS) is responsible for offshore minerals leasing and lease management under the OCS Lands Act and other statutes and for collection and distribution of mineral revenues from Federal onshore and offshore leases and, in most instances, leases on Indian lands pursuant to the Federal Oil and Gas Royalty Management Act and a variety of mineral leasing acts.

Comparison of 1987 Estimate with 1986 Estimate

(Dollar amounts in thousands)

		FY 1986 Enacted to Date	FY 1986 Adjusted Approp.	FY 1987 Estimate	Inc. (+) or Dec. (-) from Enacted	Perm. Employ. 12/31/85
Minerals and Royalty Management 1/	($)	167,010	159,829	160,100	-6,910	1,929
	(FTE)	(2,066)	(2,066)	(2,015)	(-51)	
Payments to States from Receipts under Mineral Leasing Act	($)	574,391	574,391 2/	551,486	-22,905	--
	(FTE)	(--)	(--)	(--)	(--)	
Total, MMS	($)	741,401	734,220	711,586	-29,815	1,929
	(FTE)	(2,066)	(2,066)	(2,015)	(-51)	

The major missions of the programs included in the appropriation "Minerals and Royalty Management" are: (1) To manage the leasing of oil and gas and other minerals on offshore areas under the jurisdiction of the U.S. Government; (2) to classify and evaluate the energy and nonenergy mineral resources of those areas; (3) to supervise mineral development and production operations on leased OCS lands; and (4) to collect and distribute revenues due the Federal Government, States, and Indian Tribes from all onshore and offshore mineral leases.

1/ Reflects proposal to change title from "Leasing and Royalty Management" to "Minerals and Royalty Management."

2/ Includes $23.9 million in total obligations that are to be sequestered by P.L. 99-177. The $23.9 million will not be paid during 1986, but will remain in the account and will be available at a future date to the extent permitted by law.

The appropriation "Payments to States from Receipts under Mineral Leasing Act" provides States with a statutory share of bonuses, rentals, and royalties collected by the Federal Government for minerals produced on onshore Federal lands. Total receipts have been reduced, prior to any allocation, to reflect the cost of collecting and distributing these revenues. This appropriation also provides for interest to be paid to States and Indian accounts when mineral leasing revenues due them are not disbursed within the timeframes established by the Federal Oil and Gas Royalty Management Act of 1982.

The programs and missions of the Minerals Management Service are conducted by the major components shown in the organizational chart on page MMS-3.

Highlights of the 1987 Request

The proposed funding level represents a total decrease of $6.91 million from the 1986 enacted amount in the Minerals and Royalty Management appropriation and a $22.91 million decrease in the appropriation for Payments to States from Receipts under Mineral Leasing Act. These amounts are roughly the same as the amounts proposed to be sequestered in 1986 pursuant to P.L. 99-177. Program changes totalling a net decrease of $5.59 million and 33 FTE are proposed in the OCS Program and a $2.20 million reduction is proposed in Royalty Management. In addition, a decrease of $0.78 million and 18 FTE to continue the Administration's initiative of reducing the costs of management and support activities throughout the Executive Branch is proposed. These decreases are partially offset by a base increase of $0.83 million for rental of office and other facilities space and an increase for the headquarters office consolidation which is also $0.83 million. The program changes are highlighted below by appropriation.

Minerals and Royalty Management

Outer Continental Shelf Lands

Due to decreased activity by industry and the proposed 5-year Oil and Gas Leasing Schedule, a reduced workload is projected for the oil and gas leasing program in 1987. This allows for proposed decreases in the Leasing and Environmental Program (8 FTE and $0.29 million), the Environmental Studies Program ($4.24 million), and the Resource Evaluation Program (20 FTE and $0.73 million). A reduced level of contractual effort in the Strategic and International Minerals Program is proposed for a decrease of $0.45 million. These decreases are partially offset by a proposed increase of $0.90 million for geologic and geophysical data acquisition. More efficient utilization of personnel and program resources acquired through experience and programmatic initiatives will allow a reduction of 5 FTE and $0.18 million in resources needed to oversee offshore development and production operations. By reducing the range of topics addressed in the Technology Assessment and Research Program and the number of reports in the Oil and Gas Information Program, two decreases are proposed totalling $0.60 million.

Royalty Management Program

The 1987 request reflects continued implementation of the Management Action Plan that was published in April of 1985. Full funding for the Royalty-In-Kind Program is also provided, as the program is now charging administrative fees to the buyers for this service. Decreases of $1.50 million for computer operations and maintenance and $0.20 million for computer leasing costs are proposed due to the reimplementation of the Auditing and Financial System (AFS) from minicomputers to a new mainframe computer. Additionally, the nonrecurring 1986 hardware and software costs to establish an information access system for States and Indians will not be required in 1987, resulting in a proposed decrease of $0.50 million.

General Administration

An increase of $0.83 million is proposed to improve administrative efficiency by consolidating the Virginia staff into a single location. This consolidation will eliminate the communication problems and numerous other inefficiencies attributable to having headquarters staff located in five widely separated offices.

Payments to States from Receipts under the Mineral Leasing Act

The Minerals Management Service is responsible for the collection and distribution to the States of a share of bonuses, royalties, and rentals from the leasing of onshore Federal mineral resources in accordance with applicable laws. Payments to the States in 1987 are estimated to total $550.69 million, a decrease of $23.71 million from 1986.

The 1987 request proposes that the cost of Federal onshore mineral leasing programs and activities be deducted from receipts before revenues are distributed between the States and the Treasury. This will ensure that the beneficiaries of receipts from Federal onshore mineral leasing will share in the net, rather than the gross, returns from mineral leasing activities. Enactment of the proposal will increase Treasury receipts by $53.46 million in 1987, thereby helping to decrease the Federal budget deficit.

A new budget activity, Interest on Late Payments, is proposed to provide for payment of interest to States and Indian accounts when mineral leasing receipts are not disbursed by the dates prescribed by the Federal Oil and Gas Royalty Management Act of 1982. Funding needed for these payments is estimated at $0.80 million in 1987.

Authorizations

The basic authorizing legislation for the Minerals Management Service includes the OCS Lands Act of 1953 (43 U.S.C. 1331-43); the OCS Lands Act Amendments of 1978 (43 U.S.C. 1801); the Mineral Leasing Act of 1920, as amended (30 U.S.C. 181, *et seq.*), and the Federal Oil and Gas Royalty Management Act of 1982 (30 U.S.C. 1701, *et seq.*)

Appropriation Summary Statement

Minerals Management Service

Appropriation: Minerals and Royalty Management

This is the annual operating appropriation that enables the Service to carry out its responsibilities of: implementing the 5-year OCS Oil and Gas Leasing Schedule approved in July 1982 and developing the next 5-year schedule; supervising pre-lease resource and environmental activities, and the exploration for and production of leasable energy and mineral commodities on the Outer Continental Shelf (OCS) lands; classifying and evaluating the energy and strategic and critical mineral resources of the OCS lands; performing environmental assessments to ensure compliance with the National Environmental Policy Act (NEPA); and collecting, depositing, and distributing royalties and other mineral revenues due the Federal Government, States, and Indian Tribes on all onshore and offshore leases. The 1987 appropriation request for these activities totals $160,100,000. This total represents a decrease from the 1986 enacted appropriation of $6,910,000 and a decrease of $6,954,000 from the 1987 base. A summary of the program changes proposed from the base for 1987 is provided below:

Outer Continental Shelf Lands: (-$5,587,000, -33 FTE)

This budget activity funds the Offshore Oil and Gas Leasing and Environmental, Resource Evaluation, and Regulatory Programs which accomplish: (1) performance of environmental assessments to ensure compliance with the National Environmental Policy Act (NEPA) and oil spill trajectory analyses to support the leasing program; (2) conduct of lease sales; (3) classification of OCS lands for resource potential for oil, gas, and strategic and critical minerals; (4) evaluation of tracts offered for lease by competitive bidding; (5) assurance that the Government receives fair market value for leased lands through determination of bid adequacy; (6) regulation and supervision of leasable mineral prospecting, development, and production operations on the OCS lands; (7) conduct and maintenance of an inventory of oil and gas activities; and (8) providing information concerning oil and gas activities to affected State and local governments. Additionally, funding is provided for examination of possible strategic and critical mineral leasing and for resource evaluation activities on the OCS and in the Exclusive Economic Zone (EEZ). MMS's activities related to strategic and critical minerals are coordinated with and draw directly upon work carried out by the U.S. Geological Survey and the Bureau of Mines.

Program changes, resulting in a net decrease of $5,587,000 are distributed as follows:

-- Leasing and Environmental Program. Staffing reductions due to a projection of reduced workload (-8 FTE and -$291,000) and a reduced funding level for environmental studies (-$4,237,000).

-- Resource Evaluation Program. Staffing reductions resulting from a projection of decreased activity in oil and gas leasing (-20 FTE and -$727,000); a reduced level of effort in the Strategic and International Minerals Program (-$450,000); and an increase for geologic and geophysical data acquisition (+$900,000).

-- Regulatory Program. Increased efficiency in regulating offshore operations (-5 FTE and $182,000); reduction in the range of topics for technology assessment and research studies (-$300,000) and reduction in the number of information products (-$300,000).

Royalty Management: (-$2,200,000)

The Royalty Management Program provides accounting, auditing, and compliance activities for royalties, rentals, and bonuses owed the Federal Government, States, and Indian lessors from minerals produced on Federal onshore, Indian, and Outer Continental Shelf Lands. The foundation of the program is the three automated revenue and production accounting systems supported by a variety of auditing programs to better assure that revenues owed are properly collected and disbursed.

Program decreases in Royalty Management are proposed for:

-- Systems Development and Operation. Savings in computer operations and maintenance relative to AFS reimplementation on the mainframe computer (-$1,500,000); second year savings in the cost of leasing the new mainframe computer (-$200,000); and reductions in hardware and software costs following initial development and installation of the State and Tribal Support System (-$500,000).

General Administration: (+$833,000)

General administrative expenses provide for management, executive direction and coordination, and administrative support. This includes such essential functions as budget, financial management, personnel administration, procurement and contract administration, property management, and information resource management. The Offices of the Director and the immediate executive staff are provided for in the Executive Direction subactivity. The Office of Administration and the Administrative Service Centers are supported in the Administrative Operations subactivity, while fixed operational costs, such as rental payments to GSA and Federal and commercial telecommunications and postal expenses, are included in the General Support Services subactivity.

The increase in General Adminstration is proposed for:

-- General Support Services. Consolidate the number of MMS offices located in Virginia into a single location (+$833,000). These costs are primarily non-recurring in future years.

Management Reductions: (-$783,000, -18 FTE)

Base reductions of $783,000 and 18 FTE are proposed to continue the efforts to reduce the costs of management and support activities throughout the Executive Branch of the Federal Government.

Appropriation Language Sheet

[LEASING] MINERALS AND ROYALTY MANAGEMENT

For expenses necessary for minerals leasing and environmental studies, regulation of industry operations, and collection of royalties, as authorized by law; for enforcing laws and regulations applicable to oil, gas, and other minerals leases, permits, licenses and operating contracts; and for matching grants or cooperative agreements; including the purchase of not to exceed 8 passenger motor vehicles for replacement only; [$168,018,000, of which not less than $45,260,000 shall be available for royalty management activities including general administration: Provided, That notwithstanding any other provision of law, when in fiscal year 1986 and thereafter any permittee provides data and information to the Secretary pursuant to section 1352(a)(1)(C)(iii) of title 43, United States Code, the Secretary shall pay only the reasonable cost of reproducing such data and information: Provided further, That notwithstanding any other provision of law, funds appropriated under this Act shall be available for the payment of interest in accordance with 30 U.S.C. 1721(b) and (d).] $160,100,000: Provided that in fiscal year 1987 and thereafter, the Minerals Management Service is authorized to accept land, buildings, equipment and other contributions, from public and private sources, which shall be available for the purposes provided in this account and shall be available until expended: Provided further, that notwithstanding any other provision of law, $125,000,000 shall be deducted from Federal onshore mineral leasing receipts prior to the division and distribution of such receipts between the States and the Treasury and shall be credited to miscellaneous receipts of the Treasury. (30 U.S.C. 181 et seq., 1701 et seq.; 43 U.S.C. 1331 et seq., 1801-1802; Department of the Interior and Related Agencies Appropriations Act, 1986, as included in Public Law 99-190.)

Justification of Proposed Language Changes

Minerals and Royalty Management

1. Deletion: "Leasing" from the title of the appropriation.

   The word "Leasing" is restrictive and not fully descriptive of the missions of the Service. The Minerals Management Service is responsible not only for leasing, but also for resource evaluation, environmental studies and assessments, prelease geological and geophysical permitting, and regulation of operations on offshore leases, including technology assessments.

2. Addition: "Minerals" to the title of the appropriation.

   This addition better describes the range of responsibilities and all of the activities of the Minerals Management Service.

3. Deletion: "of which not less than $45,260,000 shall be available for royalty management activities including general administration:"

   This internal limitation of the funds appropriated is unnecessary since royalty management activities are earmarked for a specific amount through the Royalty Management budget activity.

4. Deletion: "Provided, That notwithstanding any other provision of law, when in fiscal year 1986 and thereafter any permittee provides data and information to the Secretary pursuant to Section 1352(a)(1)(C)(iii) of title 43, United States Code, the Secretary shall pay only the reasonable cost of reproducing such data and information:"

   This provision is effective each fiscal year after enactment of the FY 1986 appropriation. Thus, it does not need to be repeated in the FY 1987 appropriation language.

5. Deletion: "Provided further, That notwithstanding any other provision of law, funds appropriated under this Act shall be available for the payment of interest in accordance with 30 U.S.C. 1721 (b) and (d)."

   Language for this provision is being requested in FY 1987 in the Payments to the States appropriation.

6. Addition: "Provided, That in fiscal year 1987 and thereafter, the Minerals Management Service is authorized to accept land, buildings, equipment and other contributions, from public and private sources, which shall be available for the purposes provided in this account and shall be available until expended:"

   The Minerals Management Service performs many services which benefit private sources and State and local governments (e.g., South Central Coast Cooperative Aerometric Monitoring Program (SCCCAMP) and negotiated air quality rulemaking), as well as the Federal Government. In order to continue to provide beneficial services within reduced funding levels, the MMS will negotiate for funds from the beneficiaries of those services. This language will allow MMS to accept those funds.

7. Addition: "Provided further, That notwithstanding any other provision of law, $125,000,000 shall be deducted from Federal onshore mineral leasing receipts prior to the division and distribution of such receipts between the States and the Treasury and shall be credited to miscellaneous receipts of the Treasury."

Beginning in FY 1987, the Administration proposes that the relevant onshore mineral leasing costs of the MMS, the Bureau of Land Management, and the Forest Service be deducted from Federal onshore mineral leasing receipts before such receipts are distributed between the Treasury and the States. Historically, the States have shared in gross receipts from the onshore minerals program without taking into account the Federal costs of obtaining and distributing these receipts. States receive at least fifty (50) percent of the receipts from onshore mineral leasing, but this percentage is now proposed to be based on net receipts after deducting the cost of program management. This formula represents an equitable distribution of the receipts remaining after paying the Federal costs necessary in obtaining those receipts.

Appropriation Language Citations

Minerals and Royalty Management

1. For expenses necessary for minerals leasing and environmental studies, regulation of industry operations, and collection of royalties, as authorized by law.

30 U.S.C. 181 et seq.

30 U.S.C. 181 et seq. provides for classification and leasing of coal, oil, oil shale, natural gas, phosphate, potassium, sulfur, and sodium and the payment of bonuses, rents, and royalties in such leases.

30 U.S.C. 1701 et seq.

30 U.S.C. 1701 et seq. provides for comprehensive fiscal and production accounting and auditing systems to accurately determine oil and gas royalties, interest, fines, penalties, fees, deposits, and other payments owed and to collect such amounts in a timely manner.

43 U.S.C. 1331 et seq.

43 U.S.C. 1331 et seq. extended the jurisdiction of the United States to the Outer Continental Shelf; provided for granting of leases to develop offshore energy and minerals; and provided for bonuses, rents, and royalties to be paid in connection with such leases.

43 U.S.C. 1801

43 U.S.C. 1801 establishes a policy for the management of oil and gas in the Outer Continental Shelf and development of environmental studies for lease sale areas and 5-year leasing programs.

43 U.S.C. 4321-4347

43 U.S.C. 4321-4347 provides congressional declaration of a national environmental policy.

2. for enforcing laws and regulations applicable to oil, gas, and other minerals leases, permits, licenses and operating contracts.

30 U.S.C. 189

30 U.S.C. 189 empowers the Secretary of the Interior to prescribe necessary and proper rules and regulations to carry out the purposes of this chapter (Title 30 - Mineral Lands and Mining).

43 U.S.C. 1334(a)(1)

43 U.S.C. 1334(a)(1) provides that "The Secretary shall administer the provisions of this subchapter relating to the leasing of the Outer Continental Shelf, and shall prescribe such rules and regulations as may be necessary to carry out such provisions...."

3. and for matching grants or cooperative agreements.

43 U.S.C. 1331-1343 43 U.S.C. 1801,
30 U.S.C. 1701, et seq.

This provision was included in the appropriation language in the 1984 and 1985 fiscal year budgets.

4. including the purchase of not to exceed 8 passenger motor vehicles for replacement only.

31 U.S.C. 638a(a)(b)

31 U.S.C. 638a(a) provides that "Unless specifically authorized by the appropriation concerned or other law, no appropration shall be expended to purchase or hire passenger motor vehicles for any branch of the Government...."

5. $160,100,000: In fiscal year 1987 and thereafter, the Minerals Management Service is authorized to accept land, buildings, equipment and other contributions, from public and private sources, which shall be available until expended.

No specific authority

This provision is proposed to allow the Minerals Management Service to accept funds from State governments and industry when services performed by MMS are mutually beneficial (e.g., negotiated rulemaking).

6. Provided, that notwithstanding any other provision of law, $125,000,000 shall be deducted from Federal onshore mineral receipts prior to the division and distribution of such receipts between the States and the Treasury and shall be credited to miscellaneous receipts of the Treasury.

No specific authority

This provision is proposed by the Administration to assure that States share the actual net return to the Government after taking into account the Federal costs of realizing and distributing the receipts.

Summary of Requirements

Appropriation: Minerals and Royalty Management

(Dollar amounts in thousands)

Summary of Base Adjustments	FTE	Amount	FTE	Amount
Appropriation Enacted To Date, 1986			2,066	167,010
P.L. 99-177 Reduction			- -	-7,181
Adjusted Appropriation, 1986			2,066	159,829
Base Adjustments:				
Adjustment for impact of P.L. 99-177			- -	+7,181
Other increases and/or decreases:				
Rental Payments to GSA (SLUC) and others for rate increase	- -	+827		
Savings from Management Initiatives	-18	-783		
Net, other increases and/or decreases			-18	+44
1987 Base Budget			2,048	167,054

Summary of Requirements (continued)

(Dollar amounts in thousands)

Comparison by Activity/Subactivity	FY 1985 Actual		FY 1986 Enacted to Date		P.L. 99-177 Reduction	FY 86 Adjusted Appropriation	FY 1987 Base		FY 1987 Estimate		Inc.(+)/Dec.(-) Enacted		Inc.(+)/Dec.(-) From 1986 Appropriation	Inc.(+)/Dec.(-) from 1987 Base	
	FTE	Amount	FTE	Amount	Amount	Amount	FTE	Amount	FTE	Amount	FTE	Amount	Amount	FTE	Amount
OCS Lands															
Leasing & Environmental Program	349	42,386	356	43,660	-1,877	41,783	356	43,660	348	39,132	-8	-4,528	-2,651	-8	-4,528
Resource Evaluation Program	332	26,031	338	24,004	-1,032	22,972	332	23,736	312	23,459	-26	-545	+487	-20	-277
Regulatory Program	513	30,392	484	31,902	-1,372	30,530	480	31,720	475	30,938	-9	-964	+408	-5	-782
Subtotal	1,194	98,809	1,178	99,566	-4,281	95,285	1,168	99,116	1,135	93,529	-43	-6,037	-1,756	-33	-5,587
Royalty Management															
Mineral Revenue Collections	331	12,294	316	15,079	-646	14,370 1/	312	14,893	312	14,893	-2	-60	+523	- -	- -
Mineral Revenue Compliance	186	10,050	200	10,463	-450	10,013	198	10,382	198	10,382	-2	-81	+369	- -	- -
Systems Development and Operation	57	16,524	76	19,448	-836	18,612	76	19,434	76	17,234	- -	-2,214	-1,378	- -	-2,200
Subtotal	574	38,868	592	44,990	-1,932	42,995	586	44,709	586	42,509	-4	-2,355	-486	- -	-2,200
General Administration															
Executive Direction	65	3,278	70	3,259	-140	3,119	69	3,223	69	3,223	-1	-36	+104	- -	- -
Admin.Operations	248	9,995	226	9,408	-407	9,064 1/	225	9,392	225	9,392	-3	-142	+328	- -	- -
Gen.Support Services	- -	9,846	- -	9,787	-421	9,366	- -	10,614	- -	11,447	- -	+1,660	+2,081	- -	+833
Subtotal	313	23,119	296	22,454	-968	21,549	294	23,229	294	24,062	-4	+1,482	+2,513	- -	+833
Total Requirements	2,081	160,796	2,066	167,010	-7181	159,829	2,048	167,054	2,015	160,100	-51	-6,910	+271	-33	-6,954

1/Reflects a realignment of an ADP security function ($63,000 and 1 FTE) from Royalty Management to General Administration.

Justification of Adjustments to Base

Minerals and Royalty Management

	FTE	Amount ($000)
Adjustment for FY 1986 P.L. 99-177 B.A. Cancellations.......	--	+7,181

The Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), requires a 4.3 percent reduction in non-exempt programs in FY 1986. Since the 4.3 percent reduction applies to FY 1986 only, this adjustment is made to allow a more comparable basis for showing program changes from FY 1986 to FY 1987.

	FTE	Amount ($000)
Increase in Rental Payments to GSA.........................	--	+827

The base amount of $6,539,000 provided in the FY 1986 appropriation for rent was compared with the FY 1987 estimate of $7,366,000. The increase of $827,000 from FY 1986 results primarily from two factors. First, there is an increase in estimated FY 1986 costs of $622,000. This is caused mainly by increases in space costs in Golden, Colorado, and Lakewood, Colorado, for space occupied by the Royalty Management Program; and increased costs of office space in Metairie, Louisiana, that resulted from a GSA directed office relocation. Second, there is a net bureauwide increase of $205,000 in FY 1987 rent costs.

	FTE	Amount ($000)
Savings from Management Initiatives.........................	-18	-783

This adjustment reflects the MMS portion of the Administration's initiative to reduce the costs of management and support activities throughout the Executive Branch.

Activity Summary

Activity: Outer Continental Shelf (OCS) Lands

(In thousands of dollars)

Subactivity	FY 1985 Actual	FY 1986 Appro-priation Enacted	FY 1986 Adjusted Appro-priation	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Leasing & Environ-mental Program	42,386	43,460	41,703	43,660	39,132	-4,528
Resource Evaluation Program	26,031	24,004	22,972	23,736	23,459	-277
Regulatory Program	30,392	31,902	30,530	31,720	30,938	-782
Total	98,809	99,366	95,205	99,116	93,529	-5,587

The Outer Continental Shelf (OCS) Lands budget finances the sale and award of energy and mineral leases and regulation of exploration, development, and production on Federally-leased OCS lands. The budget for the program is described in three subactivities entitled: Leasing and Environmental Program, Resource Evaluation Program, and Regulatory Program. This division is a useful description of the major activities of the Minerals Management Service on the Outer Continental Shelf Lands, and each subactivity represents an integral component of a highly coordinated program. OCS program activities are conducted pursuant to the OCS Lands Act, the OCS Lands Act Amendments of 1978 (OCSLAA), the National Environmental Protection Act (NEPA), the Coastal Zone Management Act (CZMA), and other relevant statutes.

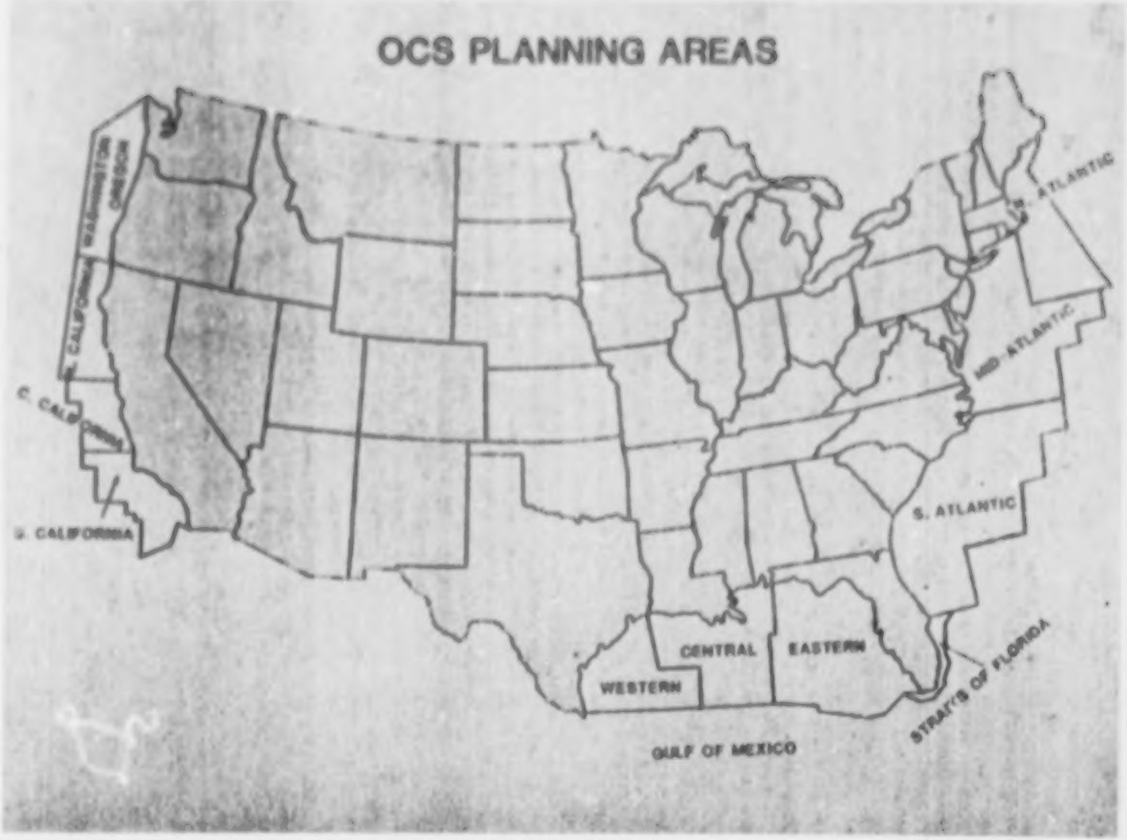

OCS PLANNING AREAS
WASHINGTON OREGON
N. CALIFORNIA
C. CALIFORNIA
S. CALIFORNIA
N. ATLANTIC
MID-ATLANTIC
S. ATLANTIC
STRAITS OF FLORIDA
EASTERN
CENTRAL
WESTERN
GULF OF MEXICO

Figure 1

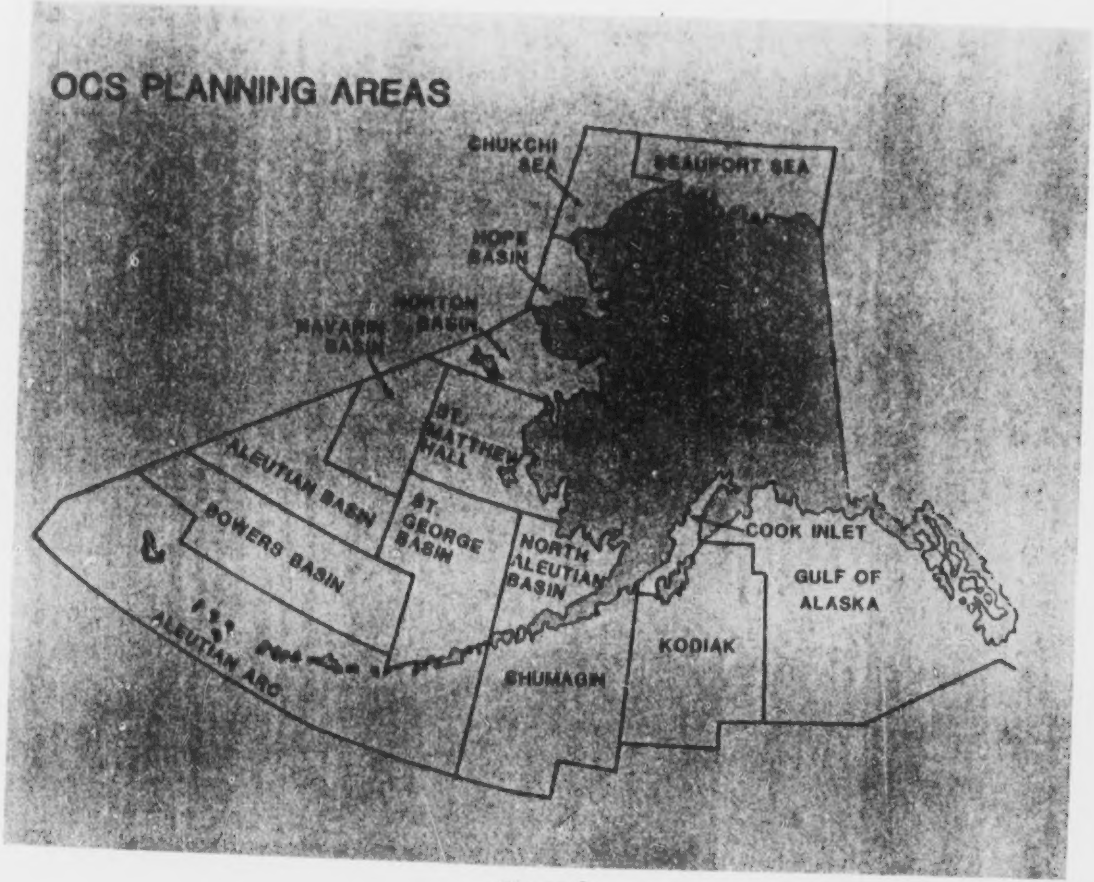

OCS PLANNING AREAS
CHUKCHI SEA
BEAUFORT SEA
HOPE BASIN
NORTON BASIN
NAVARIN BASIN
ST. MATTHEW HALL
ALEUTIAN BASIN
ST. GEORGE BASIN
NORTH ALEUTIAN BASIN
BOWERS BASIN
ALEUTIAN ARC
SHUMAGIN
KODIAK
COOK INLET
GULF OF ALASKA

Figure 2

Justification of Program and Performance

Activity: Outer Continental Shelf Lands
Subactivity: Leasing and Environmental Program

(Dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Leasing and Environmental Assessment	($) (FTE)	16,458 (356)		16,458 (356)	16,167 (348)	-291 (-8)
Environmental Studies	($) (FTE)	27,202 (--)		27,202 (--)	22,965 (--)	-4,237 (--)
Total Requirements	($) (FTE)	43,660 (356)	41,783 (356)	43,660 (356)	39,132 (348)	-4,528 (-8)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

Subactivity	FY 1986 Enacted to Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
Leasing and Environmental Program	43,660	-1,877	41,783

As a result of the reductions mandated in the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following actions may be taken:

- o The Environmental Studies effort will be reduced, particularly in those areas where industry interest has declined. Remaining Environmental Studies funds will focus on those high potential areas, areas in which insufficient data exist, and areas where industry interest has been expressed.
- o Staff levels will be reduced through attrition, in anticipation of lower budgeted FTE levels in FY 1987, especially in those functional areas that are affected by reduced industry interest.
- o ADP enhancements of mapping systems and replacement of antiquated ADP equipment will be delayed.

Authorizations

43 U.S.C. 1331-1343 P.L. 83-212 and P.L. 93-627	The Outer Continental Shelf Lands Act of 1953, as amended, extended the jurisdiction of the United States to the Outer Continental Shelf and provided for granting of leases to develop offshore energy and minerals.
43 U.S.C. 4321, 4331-4335, 4341-4347 P.L. 91-190	The National Environmental Policy Act of 1969 required preparation of environmental impact statements for Federal projects having a significant effect on the environment.
43 U.S.C. 1801 P.L. 95-372	The Outer Continental Shelf Lands Act Amendments of 1978 established a policy for the management of oil and gas in the Outer Continental Shelf and required revision of bidding systems and lease administration, coordination and consultation with affected State and local governments, development of environmental studies for lease sale areas, and development of a 5-year leasing program.

Leasing and Environmental Assessment

Objectives

Long Term

- o Implement the 5-Year OCS Oil and Gas Leasing Schedule.
- o Insure informed decisionmaking and compliance with the National Environmental Policy Act (NEPA) and other statutes in support of the OCS Leasing and Regulatory Programs, including the performance of oilspill risk analyses and environmental and socioeconomic studies.
- o Implement and refine procedures for the conduct of a strategic and critical minerals leasing program.
- o Issue leases as quickly as possible after each lease sale to ensure early receipt of revenues.

Specific 1987 Objectives

- o Complete all major prelease planning milestones on oil and gas lease sales in progress during the fiscal year.
- o Conduct 7 oil and gas lease sales.
- o Continue to improve knowledge base for possible OCS oil and gas and strategic and critical mineral leasing through environmental and other studies.
- o Issue the next 5-year OCS Oil and Gas Leasing Schedule.

Base Program

The primary functions of the Leasing and Environmental Assessment Program are: (1) To develop an OCS oil and gas leasing program which indicates as precisely as possible the schedule of lease sales which will best meet national energy needs for the 5-year period following its approval; (2) to manage and directly support the OCS oil and gas leasing activities, which for each sale begins with the Call for Information and Nominations, continues through the preparation of draft and final Environmental Impact Statements (EIS's) and Secretarial Issue Documents (SID's) and other decision documents, and ends with the conduct of the sale and the issuance of leases; and (3) to review and assess the environmental impacts associated with permits issued under the Resource Evaluation and Regulatory Program subactivities. Active coordination of the oil and gas leasing program with other Federal agencies, and active consultation with affected State and local governments and the public occurring throughout the development of the schedule and leasing process, are major tasks of this program. Additionally, the activities required to develop OCS strategic and critical minerals leasing procedures and expand the information base for potential future minerals development in the Exclusive Economic Zone (EEZ) will continue, and the viability of strategic and critical minerals lease sales will continue to be studied and evaluated.

Leasing

Oil and Gas Program: The OCS Oil and Gas Leasing Program, while accomplishing its objectives, also supports the Administration's goals of reducing the Nation's reliance on foreign oil sources, enhancing national security, and strengthening the Nation's economy. OCS oil and gas production currently provides approximately 12 percent of oil and 21 percent of gas of domestic production.

Federal budget benefits which result from the OCS Leasing Program are the bonuses and rents paid for leases and royalties from subsequent production. Approximately $5.5 billion were received in FY 1985 and approximately $5.3 billion is estimated to be collected in FY 1987. Of this amount, royalty receipts from producing OCS leases are estimated to be $3.6 billion in FY 1987.

Under the OCS Lands Act, the Secretary of the Interior must develop a 5-year OCS oil and gas leasing program that indicates as precisely as possible the size, timing, and location of leasing activity for the 5-year period following approval. In FY 1987, it is anticipated that the last steps leading to the issuance of the next 5-year OCS oil and gas leasing program will be taken. The Secretarial decision process for and issuance of the Proposed Final Program (PFP) are scheduled for FY 1987. The PFP will be submitted to the Congress and the President for 60 days, after which the Secretary can give final approval to the new program and a document explaining the new program can be prepared and distributed.

The schedule is a planning document. The specific size, timing, and location of lease sales are determined through the prelease process, the major steps of which are shown on Figure 3.

To support the 5-Year OCS Oil and Gas Leasing Schedule, the Minerals Management Service must complete a number of major steps in the leasing process, described below in chronological order. These activities rely both on environmental assessment and environmental studies data produced in this subactivity, on

CHRONOLOGY OF THE OCS LEASING PROCESS

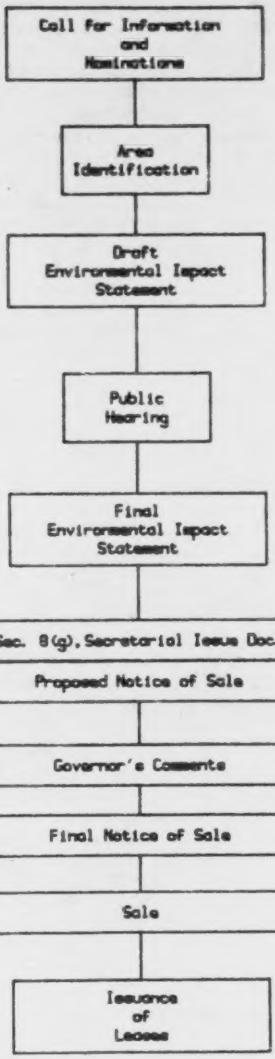

Call for Information and Nominations
Area Identification
Draft Environmental Impact Statement
Public Hearing
Final Environmental Impact Statement
Sec. 8(g), Secretarial Issue Doc.
Proposed Notice of Sale
Governor's Comments
Final Notice of Sale
Sale
Issuance of Leases

Figure 3
MMS-23

basic and interpretive data and outputs produced by programs within the Resource Evaluation subactivity, and on results of consultations with States and other Federal agencies. The 5-year program currently under development may result in modifications of these steps; in particular, there may be supplemental steps for specific sales because of conditions specific to those sales. For example, there may be a step preceding the Call for Information and Nominations for those sales (if any) on the schedule for which relatively low value brings into question whether the leasing process should be initiated. Such a step would allow evaluation under the then current economic and other conditions. Current major steps are:

The Call for Information and Nominations: Response to this Federal Register publication provides a basis for making the Area Identification which determines the area to be analyzed in National Environmental Policy Act (NEPA) documents as the proposed lease sale. It solicits nominations by industry on specific portions of the planning area which they believe have potential for discovery of oil and gas and priority ranking of those areas. It also invites comments by States, local governments, and other parties regarding areas or topics of concern that should be considered in defining the sale proposal and in further steps in the leasing process. The detailed information from industry and other respondents provides an opportunity for early balancing of hydrocarbon potential with significant environmental concerns. Also solicited in the Call is information on potential coastal zone management (CZM) conflicts associated with future exploration and development and production proposals. These concerns are addressed in the NEPA process for the individual sales. The Call typically opens all or most of an entire planning area for consideration and highlights the area having hydrocarbon potential as determined directly from work carried out by the Resource Evaluation staff. A Notice of Intent to prepare an Environmental Impact Statement (EIS) is published in the Federal Register as a companion to the Call and includes information regarding the initiation of the NEPA process including, when available, the date and location of the public meetings for EIS scoping.

Area Identification: Following the Call for Information and Nominations, the area that is believed to have potential for commercial production of oil and gas is identified from information collected through the Call for Information and from resource estimates and economic analyses developed by the Resource Evaluation program staff. This Area of Hydrocarbon Potential is considered along with information from the Call, and then the area to be proposed for leasing and to be analyzed in the NEPA document is identified.

Where a State or other major users identify conflicts which exist with other uses for any area, attempts are made at early resolution. If such areas do not meet essential tests of potential energy value and pose significant multiple-use conflicts, they may be removed from further consideration. Early consultation with States and other affected parties may yield possible mitigating measures that can be analyzed in the NEPA document and be considered in the decision process for the specific sale.

National Environmental Policy Act (NEPA) Process: This process is more fully described in a following section entitled Environmental Assessment but is briefly described here since it is an integral part of the leasing process. The process consists of the preparation of a draft and final EIS and related public hearings and may begin as early as a year before the Call for Information and Nominations with the development of general descriptive material on the planning area. Environmental and socioeconomic modelling efforts must be planned and information needs identified during this early phase. Usually this preliminary analysis occurs before detailed, lease-sale specific information and resource estimates are available.

The information that is developed during the NEPA process is carried forward during preparation and review of the Secretarial Issue Document (SID) and proposed and final Notices of Sale. The NEPA documents contain a detailed analysis of the potential environmental, economic, and social effects of the proposal based on resource estimates and development scenarios formulated by the Resource Evaluation Program. Additionally, the preparation of NEPA documents identifies information needs that the Environmental Studies Program can later satisfy for use in postlease activities or subsequent sale processes.

A Draft Environmental Impact Statement (DEIS) is filed with the Environmental Protection Agency (EPA) and released for public review about 8 months after the Area Identification.

Public Hearings are usually held 30 to 45 days after the DEIS is released to allow additional opportunity for interested individuals and groups to comment and provide information prior to the preparation of the final EIS.

Minerals Management Service considers all of the comments provided during the public review, revises the DEIS as appropriate, and releases a Final EIS and a Proposed Notice of Sale (discussed below) approximately 5 months after the Public Hearings.

The Lease Sale Decision Process is comprised of several critical elements. First, a Secretarial Issue Document (SID) and a companion decision memorandum are prepared summmarizing the findings of the planning work, such as resource potential, economic benefits, and bidding systems (derived from the Resource Evaluation Program subactivity); risks to the marine, coastal, and human environment derived from the EIS; a consideration of the potential for conflicts with State Coastal Zone Management Programs; and the views of governors and local governments of affected States and other Federal agencies as reflected in comments in response to the Call for Information and Nominations and on the DEIS. Consideration and analysis of State views is facilitated by consultation with State representatives. Second, based on the Secretarial-level decision, a proposed Notice of Sale is prepared, which contains all of the terms and conditions, including bidding systems and stipulations, proposed for the lease sale. Third, the proposed Notice is sent to the governors of the potentially affected coastal States for their comments (required by Section 19 of the OCS Lands Act) and is published in the Federal Register for public review.

In addition, Section 8(g) of the OCS Lands Act requires notification of a governor of any tract that is to be offered for lease that is located within three miles of the State's seaward boundary. The governor is provided with information on the proposed sale area such as the leasing schedule, geophysical, geological, and ecological characteristics, and estimates of the oil and gas resources. Much of this information is developed in the Resource Evaluation Program subactivity. In addition, prior to the decision process for the proposed Notice of Sale, detailed maps are produced of each block in the sale which will be subject to Section 8(g). This entails archival research into the State/Federal boundary history, mathematical computations, and mapping of both the State's seaward boundary (split block) and the 8(g) zone seaward line. Also, diagrams are reviewed by the affected State(s) which can require additional technical negotiations before both parties agree.

Under Section 8(g), the governor of each affected State must be provided with an opportunity to enter into an agreement with the Federal Government concerning disposition of revenues which may be generated by a Federal lease of a tract with common oil and gas pools with State submerged lands. This offer is made concurrent with the decision process on the Proposed Notice of Sale.

State/Federal boundary disputes can also cause extensive mapping and associated data collection efforts. The Alaska Federal/State Boundary Project is an interagency, cooperative project which provides technical data to assist in establishing the Federal-State boundary around the State of Alaska. The boundary will delineate the offshore lands administered by the Federal Government from the submerged lands administered by the State.

In addition to receipt of State comments on the proposed Notice of Sale, extensive negotiations may be carried out with State officials regarding terms and conditions of the lease sale, especially tracts to be offered and applicable stipulations. The comments of the governors, and any Federal agencies or other parties commenting on the Proposed Notice, are reviewed, analyzed, and summmarized in a Final Decision Memorandum, along with late arriving data or information for a final Secretarial decision on size, timing, location, terms and conditions of the sale. This decision is reflected in the Final Notice of Sale, which is published in the Federal Register at least 30 days prior to the lease sale. In addition, the Secretary responds to Governors' comments on the Proposed Notice of Sale and explains his rationale for either accepting or rejecting them.

Lease Sale and Issuance of Leases: The lease sale is held for the purpose of publicly opening the sealed bids that have been submitted on tracts listed in the Notice. Bidders are required to submit one-fifth of their bonus bids at the time of the sale, as well as the first year's rental. At the sale, no decisions are made concerning which high bids will be accepted. Evaluation of high bids leads to decisions to accept or reject high bids and to offer leases to successful (acceptable) bidders; this occurs within 90 days of the sale except under special circumstances. Although personnel in the Leasing and Environmental Program subactivity develop the decision material, personnel in the Resource Evaluation Program subactivity perform the bid-adequacy evaluation. Leases are offered to successful bidders who have 11 business days to accept and pay the remaining four-fifths of the bonus bid, as well as the first year's rental on the lease.

Throughout the life of the lease, any adjudication and maintenance of leases is the responsibility of the Leasing and Environmental Program staff. This includes developing and updating bidder qualification files and lease records and processing of lease assignments and relinquishments. All rents on undeveloped leases beyond the first year, and royalties on producing leases, are collected and accounted for by the Royalty Management Program.

In addition to major elements of the OCS leasing process described above, the process includes other significant activities. The OCSLAA requires consultation by Minerals Management Service with affected States and other interested parties on all aspects of leasing, exploration, development, and production of the resources on the OCS. This requirement is partially fulfilled through the activities of the OCS Advisory Board, which is composed of: (1) A Policy Committee; (2) Regional Technical Working Group Committees; and (3) a Scientific Committee. The Policy Committee, which meets two or three times each year, includes representatives of the Governors of all coastal States, various Federal agencies, and the private and public sector, and provides policy advice to the Secretary on various aspects of the OCS Program.

Six Regional Technical Working Group Committees, which operate at the field level and meet as needed during the year, provide advice to the Director on technical questions and issues relating to OCS activities. Membership totals about 110-120 technical level representatives of coastal States, Federal agencies, and members of the private and public sector.

The Scientific Advisory Committee is composed of 15 scientists, each selected on the basis of technical expertise in a discipline of importance to the Environmental Studies Program. The Committee meets three times each year and advises the Director on the feasibility, appropriateness, and scientific value of the OCS Environmental Studies Program described later in this document.

Consultation is carried out throughout the leasing process with Federal agencies such as the Department of Defense (DOD), the National Aeronautics and Space Administration (NASA), the Coast Guard, the Fish and Wildlife Service, and the National Oceanic and Atmospheric Administration regarding potential multiple-use conflicts within a proposed sale area. The Department of the Interior has a formal Memorandum of Agreement with DOD providing for consultation and resolution of joint use conflicts prior to leasing. Similar approaches are used with NASA and the Coast Guard, although no formal agreements exist.

Strategic and Critical Minerals Program, Including EEZ. Exploratory studies for possible future sales for critical and strategic minerals are conducted. Decisions on what, if any, commodities to offer will be based on work carried out under Cooperative Agreements with States, the results of participation in workshops and conferences on related topics, and indications of industry interest. The planning stage will begin with a Federal Register Notice of Intent to prepare an EIS, which will solicit comments to help design the proposal. A Draft EIS, hearings, and Final EIS would follow. Next, a Federal Register Notice of Preliminary Terms and Conditions would solicit comments on possible lease terms and conditions, such as sale configuration, bidding system, etc. After receiving comments, decision material would be prepared, decisions made, and a Notice of Sale would be published in the Federal Register. Comments from affected States and others would be solicited through the Notice of Intent, draft EIS publication and hearing, and the Notice of Preliminary Terms and Conditions.

The planning, evaluation, and development of leasing procedures and the identification of potential and viable lease areas for strategic and critical commodities will be accomplished by joint Federal/State working groups. These working groups will include interested Federal agencies and affected States.

Environmental Assessment

Oil and Gas Program. All OCS NEPA-related work, both prelease and postlease, is accomplished within the Leasing and Environmental Program.

Prelease NEPA Process. As previously noted, this process may be started as early as one year before the Call for Information and Nominations with the development of general descriptive material. Following the Call for Information and Nominations, the scope of the issues and alternatives to be addressed in the EIS is determined.

Contacts with the public and various State and local governments are made by Minerals Management Service staff and scoping meetings are held to assist in identifying significant issues and alternatives to be analyzed in the EIS. Additionally, the information gathered and developed during scoping assists in the design of the sale proposal. When this is completed, the major work on preparation of the EIS can begin.

One of the most useful and critical inputs to the prelease environmental assessment process is the oil spill risk analysis. This is an environmental modelling technique which incorporates the best available physical oceanographic and meteorological data; the estimated location and volumes of oil expected to be produced and transported as a result of the lease sale; the location of environmental resources (e.g., fish spawning areas, recreational beaches, whale migration routes, etc.); transportation routes; and the likelihood of accidents based on past records. The model provides a measure of the likelihood of oil spill occurrence, as well as the likely trajectories of spills in relation to recreational and biological resources. To report model results, an oil spill risk analysis report is prepared for each lease sale. The availability of adequate environmental data, such as that on wind and ocean currents, is a critical factor. The Environmental Studies Program provides for timely gathering and analysis of these data as well as for examination of historical oil spill and accident statistics. Oil resource estimates are provided by the Resource Evaluation Program subactivity.

The need occasionally arises for special model runs to analyze issues raised after completion of the EIS; for example, an issue raised by a State in response to the Proposed Notice of Sale.

The development of mitigating measures appropriate to the pertinent environmental concerns is another critical phase of the prelease NEPA process. Lease stipulations and Information to Lessees clauses, which are implemented through work in the Regulatory Program subactivity, are developed in conjunction with the environmental analyses. These mitigating measures, in conjunction with the existing regulatory framework, have proven to be an effective and economical means of minimizing many potential environmental effects while allowing the search for offshore oil and gas resources to proceed. Additionally, much of the analytical environmental work carried out at this stage provides background information that directly supports environmental analyses related to review and permitting of postlease activities.

Pursuant to Section 7 of the Endangered Species Act of 1973, the Minerals Management Service formally consults with the National Marine Fisheries Service (NMFS) and/or the U.S. Fish and Wildlife Service (FWS), as appropriate, if the proposed activity has the potential to affect an endangered or threatened species or harm its critical habitat. The Minerals Management Service provides NMFS/FWS with detailed background information on each lease sale and formally requests consultations and "Biological Opinions" on whether OCS mineral leasing, exploration, and development in an area will jeopardize the continued existence of endangered or threatened species or destroy or adversely modify their habitat. The formal consultation process is associated with the preparation of the EIS, and the information provided is factored into the EIS analysis and the lease-sale decision process. Additional consultation is undertaken if necessary as a part of the postlease environmental activities at the development stage.

A Draft Environmental Impact Statement (DEIS) is filed with the Environmental Protection Agency (EPA) and released for public review about 8 months after the Area Identification. The public, State and local governments, other Federal agencies, and the oil and gas industry review and comment on the document. Public Hearings are usually held 30 to 45 days after the draft is released to allow additional opportunity for interested individuals and groups to comment and provide information prior to the preparation of the final EIS.

Minerals Management Service analyzes all of the comments provided during the public review, revises the draft EIS as appropriate, and releases a Final EIS about 5 months after the Public Hearings.

Additionally, numerous technical papers are published. These papers support the lease sale EIS's, and can be incorporated by reference into the EIS, thus avoiding lengthy technical and descriptive material, while maintaining the usefulness of the EIS as a decisionmaking document.

Included under prelease environmental activities are reviews and analyses performed for geological and geophysical activities permitted under the Resource Evaluation Program subactivity. These activities require Categorical Exclusion Reviews (CER's) or Environmental Assessments.

Postlease Environmental Activities. After the issuance of a lease, lessees are notified of any special requirements (outside of the normal requirements set forth in OCS regulations) on a lease needed to mitigate potential impacts identified during the prelease NEPA process and the Secretarial decision process. Such special requirements include those measures needed to fulfill the stipulations developed through the prelease NEPA process and are applicable only to specific tracts.

Lessees develop plans detailing their proposed actions for exploration and, if sufficient resources are discovered, eventually plans for development and production including pipeline activities. Each plan must contain a certification of consistency with applicable State plans approved under the CZMA. In close coordination with work carried out under the Regulatory Program subactivity, each plan and accompanying environmental report are reviewed to determine whether they meet the requirements under the OCS Lands Act and relevant associated environmental laws and special lease stipulations, and will acceptably mitigate adverse impacts to the environment. Included is a detailed review of the impacts from the proposed activities and of the mitigation measures needed for oil spill prevention and cleanup, air quality, water quality, biologically sensitive areas and species (including endangered species, marine mammals, and fishing concerns), archeological and cultural resources, onshore support and storage facilities, and relevant meteorological, oceanographic, and geological conditions. During the review, other Federal agencies and affected States are consulted, including agencies for endangered species consultations.

Upon completion of the review, an environmental analysis is prepared in the form of a categorical exclusion review or an environmental assessment, as required by NEPA, for each plan. The analysis is used as a decisionmaking tool to determine whether the environmental impacts are acceptably mitigated and to determine if an EIS must be prepared. An EIS, with possible attendant public hearings, is required prior to plan approval if potential impacts can significantly affect the human environment. If the plan and mitigation measures are acceptable, the plan is approved.

In addition, Section 25 of the OCSLAA provides that an EIS will be required for the approval of at least one oil and gas development and production plan in any area other than the producing areas of the Central and Western Gulf of Mexico and the Santa Barbara channel offshore California.

During conduct of lessee operations, activities are monitored to ensure compliance with any required mitigation measures and that the measures in place are sufficient to mitigate the adverse impacts. By carefully evaluating the mitigation measures, technical and operational requirements are kept up-to-date and are incorporated in regulations, orders, and conditions for granting permits.

Major Leasing and Environmental Activities	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc.(+) or Dec.(-)
Call for Information and Nominations	2	5	8	+3
Area Identification Decision Memo	3	4	6	+2
Secretarial Issue Document	5	4	7	+3
Review of 5-Year Program	1	1	1	--
Decision Memo - Proposed Notice	5	4	7	+3
Section 19 State Consultations	10	31	48	+17
Proposed Notice of Sale	5	5	6	+1
Decision Memo-Final Notice	3	9	6	-3
Request for Information	7	3	3	--
Final Notice of Sale	3	7	7	--
Preliminary Sale Consultation	4	3	4	+1
Lease Sale	3	6	7	+1
Prelease Draft EIS	5	5	5	--

Major Leasing and Environmental Activities	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	+ or Dec.(-)
Prelease Public Hearing	5	9	6	-3
Prelease Final EIS	5	3	7	+4
Prelease Environmental Assessment	2	6	5	-1
Technical Paper	0	16	16	--
Oil Spill Risk Analysis Run	4	6	5	-1
Oil Spill Risk Analysis Report	2	6	5	-1
Endangered Species Consultation	16	17	18	+1
CER for Resource Evaluation Action	522	560	620	+60
EA for Resource Evaluation Action	6	13	13	--
CER for Regulatory Action	1,315	1,050	1,200	+150
EA for Regulatory Action	103	58	73	+15
EIS for Regulatory Action	2	3	2	-1
Environmental Report Reviewed	1,306	1,681	1,807	+126
Regional/National Study Plan	4	8	8	--
Statement of Work	48	51	53	+2
Technical Proposal Evaluation Process	66	62	60	-2
Active Contracts Monitored	136	156	118	-38
Synthesis Meeting	7	8	6	-2
Information Transfer Meeting	6	6	6	--

Decrease from 1987 Base

(Dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
($)	16,438	16,167	-271
(FTE)	(356)	(348)	(-8)

During 1985 and 1986, the focus of the Leasing Program on extensive consultation with all concerned public and private parties has resulted in better identification of State and environmental group concerns as well as better definition of industry interest for planned sales. For example, two Atlantic sales (#96, North Atlantic and #111, Mid-Atlantic) that had been scheduled for 1987 have been delayed based on indications of the level of interest by industry at this time. All the environmental work previously completed for these sales will remain valid and will not have to be repeated when the sales are ultimately held. This enables the MMS staff to concentrate work efforts on areas where industry has expressed a more immediate interest and where additional data remains to be developed.

Much information has been gathered through consultation on individual sales and from comments received on the proposed 5-year Oil and Gas Leasing Schedule. These factors, combined with decreased industry interest in certain areas and organization efficiencies being implemented during 1986, will result in a reduced workload in the program for FY 1987. Thus, a decrease of 8 FTE and $271,000 is proposed.

Distribution of change by object class

The object class detail for the proposed change is as follows:

	Amount ($000)
Personnel Compensation......................	-254
Personnel Benefits..........................	-37
Total	-291

Environmental Studies

Objectives

Conduct a studies program:

- That provides information necessary for prediction, assessment, and management of potential effects of oil and gas activities on the OCS and adjacent coastal areas.

- Designed to support the 5-year OCS Oil and Gas Leasing Schedule by providing data to support regional and national information needs.

- That provides data to help monitor postlease OCS oil and gas operations.

Base Program

The resources of the Environmental Studies Program were originally devoted to prelease decisions involving the prediction and assessment of environmental impacts of OCS oil and gas operations. This strategy was based on the need for this information in the numerous frontier regions existing during FY 1973-1977 and on the limited areas in which to conduct well-defined monitoring studies.

Since its inception in 1973, the program has supported prelease studies in all areas on the OCS leasing schedules. The program has produced a significant amount of relevant information on environmental and socioeconomic characteristics of currently proposed leasing areas. This existing information is used in the analyses of risks and benefits of OCS leasing as required by Section 18 of the OCSLAA and in the production of sale-specific and programmatic Environmental Impact Statements (EIS's), Secretarial Issue Documents (SID's), and other decision documents. In 1980, the Environmental Studies Program began to invest a substantial proportion of its funds in issues related to postlease management decisions. This action could be taken because the number of studies required in frontier areas had decreased, post lease areas had several years of completed study, and opportunities for scientifically credible monitoring experiments became available.

At present, particular emphasis is being given to air quality issues in Southern California, fisheries studies and wetlands loss in the Gulf of Mexico, and long-term monitoring and ecosystem studies in several regions. The South Central Coast Cooperative Aerometric Monitoring Program (SCCCAMP) will be completed with 1986 funding. In 1987 a post-SCCCAMP photochemical model evaluation will be conducted. Programs to observe the effects of OCS operations on endangered species (Bowhead and Gray Whales, sea otters, and ringed seals) are continuing. A number of studies in the Alaska OCS are conducted for MMS by the National Oceanic and Atmospheric Administration (NOAA) through the OCS Environmental Assessment Program (OCSEAP). Funding for this effort in 1987 is estimated to be approximately $7.0 million. Deep-water reconnaissance and processes studies begun in FY 1983-1984 in the Atlantic and and Gulf of Mexico planning areas will be completed in 1987. Study topics proposed for 1987 are displayed in Table 1. The information from these studies is used in postlease determinations on the effectiveness of stipulations to protect the environment under such requirements as the Endangered Species Act (ESA), Marine Mammals Protection Act (MMPA), and the National Pollutant Discharge Elimination System (NPDES). The information gained from these studies is also used in development of the overall leasing program under Section 18 of the OCS Lands Act Amendments of 1978 and in lease-sale EIS's, SID's, etc.

The Environmental Studies Program is designed to support both regional and national information needs. Regional information needs are assessed annually through the development of Study Plans. These plans are developed in close consultation with the Regional Technical Working Groups. During FY 1987, regional offices will develop a draft and then a final Regional Study Plan for studies to be completed in FY 1989. Development of these plans requires several months from initiation to final approval, including extensive review. During the annual formulation of the National Study Plan, regional needs are combined with national needs and ranked in order of their importance to decisionmakers. Studies are ranked using a set of criteria based on a system developed for the program. The Minerals Management Service is assisted in defining nationally important information needs by the OCS Advisory Board through its Technical and Scientific Committees.

The ranking system includes the following criteria:

1. Importance of the information to the decisionmaker.
2. Date of the leasing or management decision for which the study is designed.
3. Generic applicability of study results.
4. Availability of information in the subject of the study.
5. Applicability of the study to issues of regional or programmatic concern.

Decrease from 1987 Base

(Dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
($)	27,202	22,965	-4,237
(FTE)	(--)	(--)	(--)

In 1986, Congress provided an additional $1,280,000 for the Environmental Studies Program for support of the South Central Coast Aerometric Monitoring Program (SCCCAMP) in California. The work requiring MMS participation in this study was fully funded in FY 1986. Therefore, this one-time addition to the MMS budget can be reduced from the 1987 request.

Areawide reconnaissance studies (a variety of studies to characterize biological and cultural resources) have been conducted in most OCS planning areas over the last 14 years to support prelease and leasing decisions. The need for new initiatives for this type of study has been greatly reduced and generally is restricted to new planning areas being evaluated for leasing (e.g., Washington-Oregon). Emphasis will be placed on updating older data and on more detailed studies of particular problems.

Since the leasing program's presale process has begun to focus on promising acreage and early consultation with all concerned parties, early identification of industry interest has been made possible. Studies can be cancelled or reduced in effort in planning areas where industry has indicated low interest. New initiatives planned for the Environmental Studies Program will focus on areas of higher industry interest. Savings will also be realized through increased administrative efficiency with some reduced dissemination of information within the studies program and to the public. Reduction of effort is planned in the following areas and studies subjects:

o Air Quality	$1,523,000
o Bathymetric Mapping	200,000
o Chemical Quality Assurance	25,000
o Marine Mammals/Endangered Species	850,000
o Prelease Studies	779,000
o Program Support (Information Transfer and Scientific Committee Meetings)	660,000
o Socioeconomic Studies	200,000

While estimates within this list may be adjusted as program priorities change or are modified, the overall reduction of $4,237,000 will be achieved.

Distribution of change by object class

The object class detail for the proposed change is as follows:

	Amount ($000)
Other Services	-4,237

Table 1
FY 1987 Environmental Studies Program

OCS Region/ 1/ Lease Sale No.	Study Categories									Remarks
	ENDANGERED SPECIES	POLLUTANT TRANSPORT	HAZARDS	MARINE ECOLOGY	MONITORING	FATES & EFFECTS	SOCIOECONOMICS	METEOROLOGY	OTHER	
North Atlantic: 96, Mid Atlantic South Atlantic: 108		X		X	X			X		Completion of reconnaissance of biological communities and physical oceanographic processes on the lower continental slope and continental rise in all planning areas.
Eastern Gulf of Mexico Central Gulf of Mexico: 110 Western Gulf of Mexico	X	X		X		X	X			Continued refinement of oil spill trajectory modeling; evaluation of the effect of OCS operations on coastal wetlands; socioeconomic analysis of regional impacts; and regional ecosystem characterization in lesser developed regions.
Central/Northern California: 91 Southern Calif: 95 Washington-Oregon	X	X		X	X		X	X		Continued emphasis on field effects monitoring to evaluate long-term chronic discharge impacts of OCS operations; evaluation of the vulnerability of the sea otter to OCS development; continued study to define the physical oceanography of northern and central California. Collection and analysis of existing information and a studies planning conference for Washington-Oregon.
Gulf of Alaska Gulf of Alaska/ Cook Inlet Kodiak Shumagin: 86				X						Emphasis on updating information base developed for previous offerings in this area; reconnaissance of commercially important organisms.
Bering Sea Navarin Basin St. George Basin: 101 North Aleutian Basin Norton Basin	X	X	X		X	X	X			Continued development of reconnaissance information on endangered species, biological communities, and physical oceanographic features; monitoring of effects of OCS operations on whales, native communities, and fishing resources;evaluation of hazards to operations posed by sea ice.
Arctic Ocean Chukchi Sea: 109 Beaufort Sea Hope Basin	X	X	X		X	X	X			Continued monitoring of effects of OCS operations on Bowhead whales and other marine mammals; monitoring of OCS development effects on native populations; evaluation of hazards to operations posed by sea ice; continued analysis of pollutant transport by oceanographic features and sea ice.
Programmatic Studies						X	X		X	Continued emphasis on program quality assurance and integrity; development of consistent data for analyses of environmental and socio-economic impacts of a potential new 5-year schedule; management of information transfer; design and coordination of a long-term effects program.

1/ Studies included will also be applicable to sales in the next 5-Year Program from FY 1987 through FY 1992 (most sales beyond FY 1987 are currently unnumbered).

Justification of Program and Performance

Activity: Outer Continental Shelf Lands
Subactivity: Resource Evaluation Program

(Dollar amounts in thousands)

		FY 1986 Enacted to Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Resource Evaluation Program 1/	($)	24,004	22,972	23,736	23,459	-277
	(FTE)	(338)	(338)	(332)	(312)	(-20)
Total Requirements	($)	24,004	22,972	23,736	23,459	-277
	(FTE)	(338)	(338)	(332)	(312)	(-20)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

Subactivity	FY 1986 Enacted to Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
Resource Evaluation Program	24,004	-1,032	22,972

As a result of the reductions mandated in the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following actions may be taken:

- Staff and associated support costs will be reduced through attrition. These reductions will be consistent with the lower budgeted FY 1987 staff levels, and will be accomplished by redirecting program efforts from areas of declining workload due to lower projected activity by industry.
- Planned upgrading of ADP software and improvements in resource ADP models will be delayed.
- Funding of data acquisition in the Alaska and Gulf of Mexico OCS Regions will be reduced by $240,000.

1/ Funding for acquistion of geologic and geophysical data:

(In thousands of dollars)

FY 1986 Enacted To Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
4,900	4,660	4,900	5,800	+900

- o Staff training and travel will be reduced.
- o Special studies associated with the Strategic and International Minerals/Exclusive Economic Zone efforts will be reduced in scale or have study time extended.

Authorizations

43 U.S.C. 1331-1343, P.L. 83-212	The Outer Continental Shelf Lands Act of 1953, as amended, extended the jurisdiction of the United States to the Outer Continental Shelf (OCS) and provided for granting of leases to develop offshore energy and minerals.
43 U.S.C. 1801, P.L. 95-372	The Outer Continental Shelf Lands Act Amendments of 1978 established a policy for the management of oil and gas in the Outer Continental Shelf and required revision to bidding systems and lease administration, coordination and consultation with affected State and local governments, development of environmental studies for lease sale areas, and development of a 5-year leasing program.
43 U.S.C. 4321, 4331-4335, 4341-4347, P.L. 91-190	The National Environmental Policy Act of 1969 required preparation of environmental impact statements for Federal projects having a significant effect on the environment.
43 U.S.C. 1301, P.L. 92-532	The Marine Protection, Research, and Sanctuaries Act of 1972 provides that the Secretary of Commerce must consult with the Secretary of Interior prior to designating marine sanctuaries. The Minerals Management Service (MMS) provides information regarding the mineral resource potential in areas being considered for designation as marine sanctuaries.

Objectives

- o Provide sound analytical and technical support to the offshore leasing process, including postlease regulatory activities, so that all activities can be carried out effectively and efficiently.
- o Provide scientific data and information on the offshore to assure an adequate data base is available to the Secretary to make informed decisions regarding the OCS Leasing Program.
- o Provide resource estimates, exploration and development scenarios, and economic parameters and statistical data on lease sale areas.
- o Provide resource economic evaluations and bid adequacy determinations for tracts bid upon in lease sales to assure that the Government receives fair market value for leased lands.

Base Program

The Resource Evaluation Program directly supports both the Offshore Leasing and the Regulatory Program subactivities. Information is provided throughout the leasing process, focusing on the use of geologic and geophysical (G&G) data for the purpose of identifying and evaluating areas and tracts with potential for oil and gas, and economic and engineering data to develop resource estimates and resource economic evaluations and analyses. In the early stages of the leasing process, the program focuses on providing data, information and analyses required for decisions that are made relative to entire planning areas being considered for lease. As the leasing process progresses, the focus shifts from planning areas to the specific area being offered for lease and the potential prospects within that area, and finally on tracts receiving bids in a sale. Upon completion of the sale process, the emphasis shifts again to planning areas of future sales.

In preparation for each lease sale, tract and prospect specific maps and analyses are updated and evaluations are completed to provide inputs for determination of bid adequacy, which occurs at the end of the sale process. In addition, economic and engineering analyses of minimum economic field size, minimum bid level, and lease terms, among others, are also carried out. These analyses, while directly related to specific lease sales, also provide necessary input for overall program decisions such as the annual review of the current leasing schedule and any subsequent revisions. Regional mapping and analyses are important early in the leasing process and later serve to identify promising areas that are used in reviewing and developing future oil and gas leasing schedules. Additionally, the Resource Evaluation Program provides information on the availability of offshore oil and gas resources; these resources are essential to the national security of the United States and may need to be made available to meet future energy supply emergencies. A schedule of the major outputs of this subactivity related to the Proposed 5-year Outer Continental Shelf (OCS) Oil and Gas Leasing Schedule is given in Table 2.

To fulfill requirements of Section 8(g) of the OCS Lands Act Amendments (OCSLAA) of 1978, the Governors of States adjacent to areas proposed for leasing are provided, in writing, with the following information at the time of the Call for Information and Nominations.

- An identification and schedule of the areas and regions proposed to be offered for leasing;
- All information concerning the geographical, geological, and ecological characteristics of such regions;
- An estimate of the oil and gas reserves in the areas proposed for leasing; and
- An identification of any field, geologic structure, or trap located within three miles of the seaward boundary of such costal State.

The Resource Evaluation Program is responsible for providing all of this information, except for the identification and schedule of the areas proposed for lease, estimates of oil and gas reserves and ecological data characteristics. Additionally, at the time of Area Identification, the Resource Evaluation

*: Completed in prior fiscal years.
P: In progress during FY 1987.

Table 2
Schedule of Major Products of the
Resource Evaluation Program Subactivity Planned for FY 1987
That are Directly Related to Lease Sales

OCS Planning Area	Sale	G&G Data Acquisitions	Geology Report	Area of Hydrocarbon Potential	Exploration and Development Report	Area Identification	Bidding System Design	Cost & Economic Assumptions	Fair Market Value Determinations
W. Gulf of Mexico	105	*	*	*	*	*	*	*	Oct. 86
N. Aleutian	92	*	*	*	*	*	*	*	Oct. 86
Gulf of AK/CI	88	*	*	*	*	*	*	Oct. 86	Nov. 86
S. Atlantic	90	*	*	*	*	*	*	Nov. 86	Dec. 86
Mid-Atlantic	111	*	*	*	*	*	*	Nov. 86	Dec. 86
C. Gulf of Mexico	110	*	*	*	*	*	Oct. 86	Apr. 87	June 87
Beaufort	97	*	*	*	*	*	Feb. 87	July 87	Aug. 87
W. Gulf of Mexico	112	*	*	*	*	*	Mar. 87	Aug. 87	P
Supplemental 1	Su 1	*	*	*	*	*	Apr. 87	Sept. 87	P
Chukchi Sea	109	*	*	*	*	*	May 87		
S. California	95	P	*	*	*	*	Sept.87		
C. Gulf of Mexico	113	P	*	*	Oct. 86	*	P		
Navarin	107	P	*	*	*	*			
Shumagin	86	P	*	*	*	*			
N. California	91	P	*	*	Oct. 86	*			
Gulf of Alaska	114	P	*	*	Dec. 86	Oct. 86			
W. Gulf of Mexico	115	P	*	*	Oct. 86	*			
Supplemental 2	Su 2	P							
N. Atlantic	96	P	*	*	Mar. 87	Jan. 87			
E. Gulf of Mexico	116	P	*	*	Oct. 86	*			
N. Aleutian	117	P	*	Oct. 86	May 87	Mar. 87			
C. Gulf of Mexico	118	P	*	Mar. 87	P	Aug. 87			
C. California	119	P	*	Mar. 87	P	Aug. 87			
Norton	120	P	*	Mar. 87	P	Aug. 87			
Mid-Atlantic	121	P	Nov. 86	May 87		P			
W. Gulf of Mexico	122	P	*	Mar. 87	P	Aug. 87			
St. George	101	P	Dec. 86	June 87		P			
Supplemental 3	Su 3	P							
S. Atlantic	108	P	July 87						
C. Gulf of Mexico	123		Sept.87						
Beaufort Sea	124		Aug. 87						
W. Gulf of Mexico	125		Sept.87						
Supplemental 4	Su 4								

Program staff is responsible for making a determination of whether or not a common structure exists with State submerged lands on each tract in the Section 8(g) zone. This information is then provided to the Governors of affected States.

The resource information and the economic estimates derived throughout the leasing process and the conclusions resulting from analyses of these data also enable the Department to make informed balancing decisions in resolving conflicts on the OCS with other Federal Agencies, State and local governments, and other interested groups. Furthermore, MMS provides data and information concerning the resource potential of OCS areas to other Federal Agencies in support of their activities, e.g., proposed marine sanctuaries, traffic separation schemes, international boundary disputes, etc.

Those aspects of the Resource Evaluation Program which focus on providing scientific data, information, and analyses on offshore geology and hydrocarbon resource potential include: (1) acquisition of G&G data; (2) production of regional G&G maps and analyses; and (3) production of tract-and prospect-specific maps and analyses for resource economic evaluations. These outputs are essential to completing major milestones in the leasing and evaluation process leading to the acceptance/rejection of high bids received at the lease sale.

The Resource Evaluation Program combines much of the G&G data and analyses with resource economic and engineering data to produce outputs and products that are also essential to completing major steps in the leasing process. These steps proceed from the Geology Report through the acceptance/rejection of high bids. The objectives of these analyses are to: (1) Develop estimates of technologically and economically recoverable hydrocarbon resources for planning and for potential lease sale areas to be used throughout the leasing decision process; (2) analyze, develop, and design economic and engineering parameters on both a lease sale and a tract-specific basis to be used in assessing environmental impact and in determining bid adequacy; and (3) develop economic and engineering methodologies and studies for the leasing process. Fundamental to accomplishing these objectives is the design, maintenance, and update of advanced computer models, ADP systems, and data bases for economic and engineering analyses that are a basic part of the overall OCS program and decisionmaking process. The major outputs and related products of the Resource Evaluation Program are described on the following pages.

1. Acquisition of G&G Data

The objective is to acquire and analyze G&G data in order to first identify broad areas and then specific tracts with geologic potential for oil and gas. These data are the basis for mapping and evaluating the formation and distribution of potential offshore resources. The data also provide inputs for determination of bid adequacy.

Industry collects G&G data under permits issued through the Resource Evaluation Program. A condition of the exploration permits issued to industry allows MMS to selectively acquire G&G data to directly support the analyses required throughout the leasing process. These data include logs and other data from deep stratigraphic tests and significant amounts of Common Depth Point (CDP) seismic data. Since 1968, over 940,000 line miles of CDP data have been acquired in OCS areas. These data are analyzed and interpreted in order to map a proposed lease sale and determine areas having potential for the occurrence of hydrocarbon resources. They are also used to specifically locate and map geologic structures capable of trapping hydrocarbons, and to establish values for the geologic parameters necessary for resource economic evaluation in support of determinations of the adequacy of bids received at a lease sale.

Section 26(a)(1)(c)(iii) of the OCSLAA requires the Secretary to reimburse permittees for the costs of processing and reproducing G&G data requested by MMS. The Department proposed language in the FY 1986 Minerals and Royalty Management appropriation stating that in FY 1986 and thereafter, the Secretary will no longer reimburse industry for the cost of processing G&G data acquired under Federal permit. However, the Secretary will continue to reimburse industry for data reproduction costs and the cost of any special data processing or reprocessing specifically requested by MMS. This language was enacted by the Congress and included in the FY 1986 Continuing Resolution.

In FY 1985, it was determined by the Department's Office of the Solicitor, that language included in the Appropriations Bill for FY 1986 cannot be applied to permits issued prior to the enacted change in the statute. Permits issued prior to FY 1986 for data collection on the OCS state that the permittee will be reimbursed for both data processing and reproduction costs. Therefore, the Government has a contractual liability to reimburse permittees for data provided to MMS under the terms of the permit. As a result it became necessary to budget funds for: (1) Reproduction cost of data acquired under permits, special processing, interpretations, special data, special data storage, 8(g) data acquisitions; and, (2) processing of data acquired under permits issued prior to enactment of the FY 1986 appropriation language which contain specific provisions requiring reimbursement for processing costs.

A comparison of these costs for the period FY 1985-1987 is given below:

(In thousands of dollars)

	FY 1985 1/ Actual	FY 1986 Enacted	FY 1987 Estimate	Inc.(+) or Dec.(-)
Data reproduction and special processing of data not available under permit to support litigation, section 8(g) and boundary disputes	--	2,000	2,000	--
Processing costs for data acquired under permits issued prior to enactment of the FY 1986 appropriation language	--	2,900	3,800	+900
Total Funding	7,800	4,900	5,800	+900

The CDP seismic data provide the primary data base required for much of the effort in the area identification and evaluation process and to support the activities of other Federal Agencies. Seismic data in a planning area are used not only for products related to a specific sale, but are supplemented, as required, with new data for later sales in the same planning area. As indicated in Table 2, products requiring G&G data will be completed or in progress for more than 32 planned OCS oil and gas lease sales. Substantial amounts of CDP data (estimated at 75,000 line miles) are planned to be acquired in FY 1987 in order to augment and update previously acquired data.

Products:

a. G&G Permits Processed and Approved

Prelease data gathered by industry on the OCS require the issuance of G&G permits. Processing and approval of exploration permits includes: Review of applications for permits and agreements for OCS geologic or geophysical scientific research or exploration for mineral resources; the issuance of permits and agreements, including terms, conditions, and stipulations; the monitoring of permit activity; and all correspondence with prospective permittees.

b. G&G Data Acquisition Actions

After data have been collected by permittees, MMS selectively acquires those data which are needed to augment the existing data base. The steps in acquiring data from permittees include: Preparation and approval of a proposed data acquisition list; onsite inspection of data; selection

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1/ In FY 1985 expenditures for G&G data acquisition ($7,800K) included funding for data processing and reproduction.

of data; preparation and submittal of requisition forms to reimburse permittees for data reproduction and the cost of special reprocessing requested by MMS; preparation of justifications for selection of data and lists of deliverable items; and contact and correspondence with permittees, administrative personnel, and headquarters personnel.

At the beginning of each fiscal year, G&G data requirements to support the leasing schedule are identified and priorities established. Throughout the year these data needs are reassessed as required by the leasing schedule.

A comparison of these major products for the period FY 1985-1987 is given below:

Major Products	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
G&G permits processed and approved	465	400	400	—
G&G data acquisition actions	120	130	140	+10
Line miles of CDP data acquired	61,450	63,300	75,000 1/	+11,700

Estimated FY 1987 costs:

- o To process and approve 400 G&G permits and accomplish 140 G&G data acquisition actions totals $825,000.
- o Reproduction and processing or reprocessing of selected G&G data totals $5,800,000.

2. Production of Regional G&G Maps and Analyses

The objective of this activity is the development of maps identifying areas favorable for the accumulation of hydrocarbons and the analysis of the geologic history and processes involved in the formation and distribution of offshore resources. These maps and data are the basis for the Geology Report used in the early stages of the leasing process and later as input to the resource economic evaluation process.

The primary objective for the production of regional G&G maps and analyses is to provide preliminary reconniassance of the planning area in preparation for lease sales. This is done by analyzing technical and scientific data and information in order to develop a basic knowledge of the geologic history and its effects on hydrocarbon generation, distribution, and accumulation within the planning area. This knowledge provides the basis for the Geology Report and associated maps, which are the initial technical analyses in the

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1/Represents an estimate of the total FY 1987 CDP data requirements needed to support the leasing program. This estimate includes data acquired under permits issued prior to FY 1986 which require reimbursement for processing costs.

early stages of the leasing process that describe the geology, geologic risk, and resource potential of the planning area.

The Geology Report consists of a geologic analysis section, a petroleum geology section, and an environmental geology section that includes a general description of potential geohazards.

Release of the Geology Report generally precedes the Call for Information and Nominations by approximately 8 months.

The data, information, and analyses in the Geology Report are updated and used in the leasing process as input to the National Environmental Policy Act (NEPA) documents, the Exploration and Development (E&D) Report, and other MMS and Department decision and option documents. The maps and information also support preparation of the Resource Estimates Report and analyses carried out in the Area Identification and prospect evaluation process. Once an initial Geology Report is prepared for a planning area, it is updated with new or additional data, as appropriate, to prepare geology reports for succeeding sales in the same planning area.

Products:

a. Geology Report: This report consists of the following specific sections:

(1) The geologic analysis section describes the general geology and geologic history of the planning area. This provides the basic understanding of the geology and the resource occurrence and potential of the area.

(2) The petroleum geology section analyses and provides data and information on the resource potential, probability of hydrocarbon occurrence and items such as source and reservoir rock, traps, and maturation.

(3) The environmental geology section provides general information over the planning area about potential shallow geologic features, such as shallow faults, accumulations of shallow gas, and slumps which could be hazardous to exploration and development operations. This section also provides information on the occurrence of ice and ice hazards, if any, and seismic and volcanic activity.

During FY 1987, general regional geohazards information will be updated to support the preparation of NEPA documents and, combined with the site-specific geohazards data submitted by industry, to support review of Exploration and Development Plans and Applications for Permit to Drill. As shown in Table 2, six (6) Geology Reports are planned to be completed in FY 1987.

b. Determinations of Area of Hydrocarbon Potential

Maps and associated documents are required prior to the issuance of the Call for Information and Nominations to identify those portions of the planning area having various ranges of hydrocarbon potential.

This information represents a significant refinement in that contained in the Geologic Report, which describes general geologic aspects of the entire planning area.

To initiate action on a lease offering, it is necessary to determine which specific areas, within a planning area, have potential for oil and gas accumulation. This effort goes beyond the analysis of G&G data. The identification of the Area of Hydrocarbon Potential provides a basis for industry and public reaction during the Call for Information and Nominations and must be completed several months prior to the issuance.

4. Recommendations for Area Identification

A significant step in the leasing decision process is the identification of that portion of the planning area that is proposed to be offered for lease. Area Identification occurs approximately 7 months after the Call for Information and Nominations is issued. In response to the Call, industry, the public, and other interested parties submit information to the MMS on what areas within the planning area should or should not be included in the proposed sale.

The information and knowledge of the hydrocarbon potential in the planning area developed in the MMS Resource Evaluation Program are combined with information on industry interest and priorities and then weighed against environmental, economic, and defense concerns to identify the specific area to be included in the proposed sale. This area is the focus of the analysis in the EIS document.

A comparison of the major products of Regional G&G Maps and Analyses for the period FY 1985-1987 is given below:

Major Products	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Geologic Reports	8	7	6	-1
Determination of Area of Hydrocarbon Potential	7	6	7	+1
Area Identification Recommendations	7	6	7	+1

Estimated FY 1987 costs directly associated with preparing these products totals $[illegible].

5. Production of Tract and Prospect Specific Maps and Analyses

This product consists of detailed G&G mapping and analysis of tracts, either individually or as prospects, in order to estimate their resource potential. Maps, data, and analyses form the basis for determining parameters that serve as inputs to the resource evaluation process and the statistic analysis process for assessing bid adequacy.

A comparison of the major products of the Tract and Prospect Specific Maps and Analyses for the period FY 1985-1987 is presented below.

Major Products For:	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Completed Sales	4	6	7	+1
Sales in Progress	21	26	25	-1

For FY 1987, the following seven oil and gas lease sales will be completed: 88 (Gulf of Alaska); 111 (Mid Atlantic); 97 (Beaufort Sea); 90 (S. Atlantic); 110 (C. Gulf of Mexico); 112 (W. Gulf of Mexico); and Supplemental 1. Products for 25 sales proposed beyond FY 1987 will also be prepared. Generally, work devoted to mapping and analysis of tracts commences 2 years prior to a proposed lease sale, with the exception of sales in the Gulf of Mexico, where mapping and analysis begins 1 year prior to the sale. Estimated FY 1987 costs associated with the analyses related to the above products total $3,491,000.

b. Development of Resource Estimates for Planning Areas: Economic and engineering analyses, supplemented by geologic and geophysical analyses, are carried out to develop estimates of undiscovered technologically and economically recoverable resources for planning areas, lease sales and alternatives, Secretarial Issue Documents (SID's), and the OCS Information Program. These activities include the economic and engineering analyses needed for resource assessment. Products can be divided into those related to planning areas and those related to lease sale areas. Those initially developed for planning areas are updated, as appropriate, with new or additional data for succeeding sales in the same planning area.

Planning area resource estimates are developed for:

a. Biennial reports to Congress containing estimates of undiscovered recoverable oil and gas resources on the OCS as required by Section 606 of the OCSLAA of 1978.

b. Use in the annual review of the 5-year OCS oil and gas leasing schedule and any subsequent development of a new 5-year leasing schedule.

Lease sale area resource estimates are developed for use in:

a. EIS Reports, NEPA documents, and other decision documents.

b. Summary reports and updates produced by the OCS Information Program.

A comparison of the annual number of Resource Estimates for Planning Areas developed during the period FY 1985-1987 for use in reports, review, etc., are given below:

Resource Estimates for:	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Section 606 Reports	--	1	--	-1
Review of 5-Year Leasing Schedule	1	1	1	--
NEPA and Decision Documents	11	13	13	--

Estimated FY 1987 costs associated with development of the above products totals $890,000.

5. Economic and Engineering Evaluations for Lease Sales: Economic and engineering parameters, on a lease-sale and tract-specific basis, are analyzed, developed, and designed for the purpose of determining bid adequacy and assessing impacts on the objectives of the OCSLAA. These parameters include oil and gas prices; inflation and discount rates; exploration, development, production, and transportation costs; supply and demand, and number of platforms, wells, and subsea completions.

   Products:

   a. E&D Reports. These reports contain infrastructure and exploration, development, and production scenarios that serve as the basis of the analyses related to the NEPA process. The reports are updated during the leasing process and are used for the design of the specific bidding system to be used in the sale.

   b. Cost Estimates and Price Assumptions. These are prepared for each lease sale and include: oil and gas prices; transportation costs (pipeline, tanker, etc.); real price increases; inflation and discount rates; windfall profits tax rates; and exploration, development, and production costs.

   c. Bidding System Design. This product consists of the analyses to support designation of bidding systems, lease terms, rental policies, and minimum bid requirements for a particular lease sale. Alternative bidding systems provided for in the OCSLAA are considered. Unique lease-sale costs and market conditions require examination of the various revenue components which comprise a bidding system. An analysis is made of the impacts of alternative royalty rates, minimum bid requirements, rental policy, length of lease terms, various bidding systems, etc., on the multiple goals of the OCSLAA, such as the maintenance of competition and expeditious exploration, development and production. In addition, an analysis of the impacts of existing leases issued under alternative systems are reviewed in terms of newly arising information on exploration and development effects.

d. Fair Market Value Determinations. These are decisions regarding the adequacy of high bids received at a sale. This includes determinations of viable prospects and tract types, tract-specific resource economic values, when required, and the development and analysis of economic criteria te determine the final acceptance or rejection of high bids.

e. Economic Value Estimates. This product includes cost/benefit analyses and economic and social value estimates for SID's, the formulation of the 5-year leasing schedule, each lease sale, revenue projections for budget purposes, and other estimates associated with statutory or policy changes.

The schedule of products planned for FY 1987 is shown on Table 2.

A comparison of the major products of Economic and Engineering Evaluations for Lease Sales during the period FY 1985-1987 is given below.

Estimated costs of developing these products in 1987 total $1,470,000.

Major Products	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
E&D Reports	5	8	7	-1
Cost Estimates and Price Assumptions	4	6	7	+1
Analysis for Design of Specific Bidding System	6	5	6	+1
Analysis for Fair Market Value Determinations	2	5	7	+2
Economic Value Estimates	18	16	16	--

6. Economic and Engineering Methodologies and Studies for the OCS Leasing Program: Advanced computer models and ADP systems and data bases are analyzed, designed, maintained, and updated to serve as the primary support for the conduct of economic and engineering studies that are used throughout the lease-sale process and for overall OCS program and policy issues. Activities in this support function are generic in nature and are described below.

a. Development, refinement, modification, and maintenance of discounted cash flow and resource assessment computer models and methodologies, including the design of new computer models for resource assessment and resource economic evaluation.

b. Design, development, refinement, maintenance, and update of ADP data bases and systems to support lease sale fair market value determinations, and to provide a historical data base for economic studies, other analyses, and reports such as the Annual Report to Congress on alternative bidding systems.

c. Economic Studies and Congressional Report to Congress. Sections 205 and 207 of the OCSLAA each require an annual report to Congress on the scheduling and use of alternative bidding systems in the OCS program and the costs and benefits derived from their use, as well as joint bidding and new market entrants. To prepare these reports and to make recommendations on leasing policy for the overall program and for each offering, economic studies are conducted on specific bidding system parameters such as viable royalty rates, minimum bid levels, regulatory changes, lease terms, rental policies, and tract size.

d. Various generic program-wide studies applicable to the entire leasing process are performed. Study issues include the effects of areawide versus tract selection sales, the costs and benefits associated with the OCS program, various changes, bid adequacy procedures, and effects of various policies on Government receipts.

e. Economic Value Estimates and Cost/Benefit Studies for Formulation of the 5-year OCS Leasing Schedule. These are economic value estimates and cost/benefit studies for use in developing new 5-year leasing schedules or the required annual review.

f. Engineering Studies. Consistent and pertinent programwide technological procedures are designed, developed, and implemented, and technology for adverse and severe conditions is assessed.

A comparison of the major products of Economic and Engineering Methodologies and Studies for the OCS Leasing Program during the period FY 1985-1987 is given below. Estimated FY 1987 costs related to the development of these products total $1,925,000.

Major Products	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Economic Studies	25	25	25	--
Engineering Studies	5	6	6	--

Cooperative Agreement: Texas Bureau of Economic Geology

In an effort to broaden the base of data and information available to MMS on offshore lands, the MMS entered into a cooperative agreement with the Texas Bureau of Economic Geology (BEG), University of Texas at Austin, in September 1983. The BEG acts as a central contact between the MMS and the geological surveys of coastal States and monitors multidiscipline, scientific activities conducted by the surveys for the MMS. The general area that the cooperative effort addresses is geologic studies relating to hydrocarbon resources.

In FY 1985-1986, funding for the MMS/University of Texas agreement totaled approximately $605,000 per year with approximately 21 coastal States participating in the program.

Strategic and International Minerals/EEZ

Although the main focus of the Resource Evaluation Program will be on OCS oil and gas resources, a small effort will also be directed to studies of strategic and international mineral resources, such as polymetallic sulfides, carbonate sands, phosphate and Pacific Ocean cobalt crusts to determine whether future lease sales of these resources are indicated. The process to be followed for these sales will parallel that of oil and gas.

The Minerals Management Service established cooperative arrangements with the States of Oregon, California, and Hawaii for the joint analysis of resource potential and environmental consequences of potential OCS solid mineral leasing and the development of the NEPA requirements for offshore mineral development. Joint Federal/State Working Groups have been established to consider the economic and engineering aspects of strategic and international minerals leasing offshore Oregon, California, and Hawaii including the Johnston Island EEZ. Offshore areas within the jurisdiction of the United States are identified and investigated for the development potential of minerals other than oil, gas, and sulfur. Various mineral commodities (e.g., cobalt-rich manganese crusts, polymetallic sulfides, placers, construction materials, carbonate sands, and phosphates) are being examined to determine their commercial viability. Additionally, MMS provides technical support to the State Department for minerals including oil, gas, and strategic/international resources for areas beyond national jurisdiction including the Arctic and Antarctic.

Decrease from 1987 Base

(Dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
($)	23,736	23,459	-277
(FTE)	(332)	(312)	(-20)

The FY 1987 decrease is comprised of the following:

G&G Data Acquisition (+$900,000)

During FY 1987, approximately 75,000 line miles of seismic data will be needed to support: (1) fair market value determinations for seven sales (105-Western Gulf of Mexico, 92-North Aleutian Basin, 88-Gulf of Alaska/Cook Inlet, 97-Beaufort Sea, 90-South Atlantic, 110-Central Gulf of Mexico, and 111-Mid-Atlantic); (2) the design of bidding systems for six sales (95-Southern California, 110-Central Gulf of Mexico, 109-Chukchi Sea, 112-Western Gulf of Mexico, Supplemental 1, and 97-Beaufort Sea; (3) preparation of exploration and development reports for seven sales (91-Northern California, 96-North Atlantic, 117-North Aleutian Basin, 113-Central Gulf of Mexico, 114-Gulf of Alaska Basin, 116-Eastern Gulf of Mexico, and 115-Western Gulf of Mexico; and (4) the determination of area of hydrocarbon potential for seven sales (121-Mid-Atlantic, 118-Central Gulf of Mexico, 120-Norton Basin, 119-Central California, 122-Western Gulf of Mexico, 101-St. George Basin, and 117-North Aleutian Basin).

For FY 1986, funding available for reimbursement of processing costs of geologic and geophysical (G&G) data was reduced from the estimated requirement of $4.914 million to $2.9 million (a decrease of $2.014 million). The proposed increase of $0.9 million in FY 1987 is, therefore, necessary to: (1) purchase a portion of G&G data gathered under permits issued prior to FY 1986 which could not be acquired by the government within the reduced FY 1986 funding level; and (2) allow additional acquisition of pre FY 1986 G&G data due to the declining availability of data collected during FY 1986. It is noteworthy that a decline of 25 percent in G&G permit activity occurred during FY 1985. This trend of decreasing exploration activity has been accompanied by a significant increase in reprocessing of older data.

The FY 1987 budget request includes: $2.0 million to cover reimbursement for data reproduction, special processing requested by MMS, and acquisition of G&G data not available under permit to support litigation, Section 8(g) actions, and boundary disputes; and $3.8 million for reimbursement costs for data acquired under permits issued prior to FY 1986. This represents an increase of $0.9 million from the FY 1986 level of $2.9 million available for reimbursing industry for data processing costs.

Decreased activity in Oil and Gas leasing: (-$727,000, -20 FTE)

A programwide reduction of 20 FTE is proposed as a result of the development of priorities for the workload in the oil and gas leasing program and decreased activity indicated by industry. A projection of the workload resulting from the proposed 5-year oil and gas leasing schedule combined with program efficiencies and restructuring will permit further workload savings.

Resource studies have been conducted in most OCS planning areas to support prelease and leasing decisions. The need for new initiatives in frontier areas has been reduced as a result of diminished interest as indicated by projected industry exploration plans. During FY 1987, program activities will focus on areas of higher industry interest and will be reduced in planning areas for which little industry interest has been indicated.

Emphasis will be focused on utilizing the existing data base to the maximum extent possible to provide the scientific information and supportive analyses necessary to determine resource estimates, formulate exploration and development scenarios, conduct economic evaluations, and perform bid adequacy determinations to assure that the Government receives fair market value for leased lands.

The proposed reduction in FTE employment will be primarily accomplished through limiting new hires and delaying the replacement of employees leaving the Service.

Decreased activity in Strategic and International Minerals (-$450,000)

In the Strategic and International Minerals program, funding for contractual study efforts will be decreased by $450,000. The determination of OCS solid nonenergy minerals potential and commercial viability will focus primarily on the cobalt crusts, offshore Hawaii. Studies of other solid mineral commodities (carbonate sands, phosphates, placers, and construction materials) will be on a reduced scale as a result of a reassessment of priorities and a reduction of program activities resulting from projections of industry interest.

Distribution of change by object class

The object class detail for the proposed change is as follows:

	Amount ($000)
Personnel Compensation	-609
Personnel Benefits	-93
Travel	-19
Supplies and Materials	-6
Other Services:	
Strategic & International Minerals	-450
G&G Data	+900
Total	-277

Justification of Program and Performance

Activity: Outer Continental Shelf Lands
Subactivity: Regulatory Program

(Dollar amounts in thousands)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Regulation of Operations 1/	($)	29,574		29,392	29,210	-182
	(FTE)	(472)		(468)	(463)	(-5)
Technology Assessment and Research	($)	1,164		1,164	864	-300
	(FTE)	(5)		(5)	(5)	(--)
Oil and Gas Information	($)	1,164		1,164	864	-300
	(FTE)	(7)		(7)	(7)	(--)
Total Requirements	($)	31,902	30,530	31,720	30,938	-782
	(FTE)	(484)	(484)	(480)	(475)	(-5)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

Subactivity	FY 1986 Enacted to Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
Regulatory Program	31,902	-1,372	30,530

As a result of the reductions mandated in the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following actions may be taken:

- Staff levels will be reduced through attrition, as a result of consolidating regional office permit review staffs in the Gulf of Mexico.
- Reports and indices will be published less frequently, while still meeting mandated reporting requirements set by law.
- The level of independent research will be reduced in lieu of more participation in industry projects.

1/ Includes prior year element, Reserve Inventory.

Authorizations

43 U.S.C. 1331-1343 P.L. 83-212	The Outer Continental Shelf Lands Act of 1953, as amended, extended the jurisdiction of the United States to the Outer Continental Shelf and provided for granting of leases to develop offshore energy and minerals.
43 U.S.C. 1801 P.L. 95-372	The Outer Continental Shelf Lands Act Amendments of 1978 reaffirmed the established policy for the management of oil and gas in the Outer Continental Shelf, including coordination and consultation with affected State and local governments, the preparation of an environmental assessment for each plan, the development and maintenance of estimates of Federal Outer Continental Shelf (OCS) oil and gas reserves, and providing information to the affected States.
33 U.S.C. 1101-1108 P.L. 89-454	The Coastal Zone Management Act of 1972, Section 307(C.3) established consistency provisions for certification that proposed activities affecting land or water uses in the coastal zone of an affected State complies with that State's management program.

Objectives

- Regulate and supervise OCS oil, gas and nonenergy minerals exploration, development, and production operations in a manner that ensures protection of the environment, protection of the natural resources, and prompt and efficient exploration and development.

- Provide a comprehensive technological base for the supervision of leasehold operations, including the use of best available and safest technologies (OCSLAA Sec. 21(b)). Provide timely technical data for determination of reliability and risk associated with OCS operations.

- Conduct and maintain an inventory of oil and gas reserves on OCS leases.

- Provide information concerning OCS oil and gas and other mineral activities to affected State and local governments.

The Regulatory Program consists of several component elements: Regulation of Operations; Technology Assessment and Research; and Oil and Gas Information.

Regulation of Operations

Objectives

- Assuring a safe and pollution-free environment through careful supervision of the management of activities such as exploration, development, and production operations, the transportation of production to shore, and pipeline design and maintenance.

- Identifying and reporting the cause of major fires, oilspills, deaths, or significant injuries.
- Conducting an effective inspection and enforcement program.
- Assuring ample opportunity for participation by affected States in the decisionmaking process during the review and approval of lessee-submitted exploration plans and development and production plans.
- Assure that affected States are provided with copies of exploration plans and development and production plans to enable them to deal with actual and potential onshore effects of OCS activities.
- Assure that industry personnel engaged in activities on the OCS are properly trained in safety, environmental protection, and natural resource protection.
- Develop and maintain an accurate and timely data file of oil and gas resources.
- Determine the maximum attainable rate (MAR) of production of crude oil and gas from significant fields on the Outer Continental Shelf.
- Provide an analysis of whether the actual production has been less than the MAR, and, if so, the reasons for the difference.
- Provide an estimate of the total discovered crude oil and natural gas reserves by field (including proved and indicated reserves).
- Provide technology support to MMS operations personnel as the industry moves into the hostile frontiers of the deep oceans and ice infested Arctic.
- Provide maximum assurance of structural integrity of production platforms, especially those located in deep waters or hostile environments.
- Assure proper lease development and preventing waste of hydrocarbons in the reservoir through review of maximum efficient rates of production, verification of shut-in wells, reviewing requests for flaring of gas, reviewing requests for suspension of production, and evaluating opportunities for enhanced recovery.
- Determine pricing categories for natural gas production from new leases, new reservoirs on existing leases, high cost natural gas reservoirs, and stripper wells.
- Assure that appropriate Minerals Management Service regulations and management systems are in place to make certain that procedures for leasing and mining operations for nonenergy minerals are available.

Base Program

Regulation of the OCS Oil, Gas, and Nonenergy Minerals Operations Program provides for the comprehensive and systematic review, approval, and supervision of lessee-conducted exploration, development, and production operations on the OCS. This is accomplished through the review and approval or disapproval, if appropriate, of exploration plans, development and production plans, development operations, and coordination documents; and through the issuance of permits, the inspection of lessee-conducted activities to assure compliance with governing requirements, and the taking of appropriate enforcement actions when requirements are not met.

The enactment of the OCS Lands Act Amendments of 1978 (OCSLAA) (P.L. 95-372) resulted in significant additional regulatory responsibilities for the Minerals Management Service. These mandated responsibilities require: Coordination of approvals of OCS exploration plans and development and production plans with the affected States; conducting scheduled inspections for each facility annually (with intermittant unscheduled inspections to assure regulatory compliance); the establishment of a civil penalties program through which the Minerals Management Service may assess and collect monetary penalties; and the development and maintenance of up-to-date estimates of Federal OCS oil and gas reserves in developing and developed fields.

Oil and gas produced from the OCS contribute significantly to the Nation's current and future energy supplies and to the Nation's plans to reduce its dependency on foreign sources of energy. Production from the OCS has only been established in the Gulf of Mexico and in the Pacific Ocean off southern California. Exploration drilling has been conducted off Alaska with some success and off the Atlantic coast with noneconomic results. However, this exploratory activity is expected to continue. Off the coast of California, production is on the increase. Discoveries made in the Santa Maria Basin have given rise to even more exploratory drilling and to the submission of additional development and production plans.

Oil and gas reserves are increasing in the Gulf of Mexico. Significant discoveries in deep water areas of the Gulf of Mexico are expected to continue to contribute to these reserves. Recent lease sales off the Alaskan Arctic coast will be subjects of exploration drilling during the near term. These Arctic areas are considered to be highly promising and could lead to additional economic discoveries that may result in development and production early in the 1990's.

To accomplish the regulatory program in accordance with statuatory requirements, and to assure acceptable leasehold operations, the Minerals Management Service performs a number of related tasks. These tasks are generally performed in response to lessee submitted proposals and requests and are detailed below:

Approval of Exploration and Development and Production Plans. Lessees are required to submit to the Minerals Management Service statements of offshore and onshore impacts expected to be associated with the implementation of proposed exploration plans or development and production plans (in the western Gulf of Mexico development operations coordination documents are used in lieu of development and production plans). The Minerals Management Service's Supervisor for Offshore Field Operations (S-OFO) in each region must determine the adequacy of these statements, along with the plans, and transmit copies of both documents to affected States. The States may then make comments on these documents to the supervisor who, in turn, must respond in writing to these comments. The

Minerals Management Service Offshore Minerals staff periodically reviews each plan to determine if operations are in accordance with the approved plan and appropriate results are being obtained.

Particular emphasis is placed on the postsale evaluation of geologic hazards to determine whether additional stipulations should be placed on lease exploration and development activities when lessees submit proposed exploration plans and development and production plans for approval. These geologic hazards analyses are based upon lessee-submitted high resolution surveys and other hazards data and information in support of individual applications for plan approval.

Safety and Technology. The Minerals Management Service must ascertain that the lessee proposes to use the best available and safest technologies. This is accomplished by a formal program of reviewing technologies used by the industry and conducting applied research where deemed necessary to provide technology support to MMS operations personnel. The program concentrates on operational functions, such as well control training requirements, permit and plan approvals and accident investigations. It is accomplished during the plan review and approval process and through review of current technology improvements by the Operations Technology Assessment Committees at the regional and headquarters levels. Risk analysis is currently being evaluated as a part of the Technology Assessment and Research Program element. This will determine if risk analysis can be used in the OCS regulatory process and to determine the limitations of its applicability.

Platform Structures. Lessees are required to submit for approval the design, fabrication, and installation plans for the siting of fixed platforms in deeper water or other unique settings. Such plans are reviewed by the Minerals Management Service, and each project is monitored by a third party certification or verification agent who is approved by the Minerals Management Service.

Application for Permits. The processing of Applications for Permit to Drill (APD) is ongoing and anticipated to increase. This workload is predicated on and postdates the processing of exploration/development and production plans. The APD is a much more definitive document that deals with the specific technology and engineering that an operator proposes to use in drilling a particular well, after receiving approval for an exploration plan or development and production plan.

Various other types of applications for performing work on production wells, including workovers, recompletions, and abandonments are likely to continue increasing, especially in the existing producing areas of the Gulf of Mexico. Workovers are often necessary during the life of a well to restore or increase production. Recompletion usually involves setting a cement plug and perforating the well bore in a different pay zone. Abandonments are accomplished by plugging the well and removing casing to a specified depth below the mud line. These types of activities must be reviewed and approved by MMS officials to assure that the provisions of the OSCLAA and the Department of the Interior regulations are followed.

Enhanced Recovery Operations. The analysis of enhanced recovery operations involves a technical review of operator proposals pertaining to various producing fields and reservoirs. The Gulf of Mexico is currently the largest production area within the OCS. Some, but not all, of the producing reservoirs in the Gulf of Mexico are susceptible to enhanced recovery operations. These analyses examine reservoirs and provide technical analysis and review to ensure optimum recovery in mature producing areas. These efforts will continue and quite likely increase as the current and newly discovered reservoirs are produced through the various stages of their life cycle. To a degree, the economics of the oil market will play a role in the rate at which this work progresses.

Inspection of Operations. The inspection of OCS operations is a major work unit of this program. The number of inspections that are completed must be viewed in an overall context as representing a compilation of numerous checks and examinations performed by the MMS inspectors. Some of the inspections conducted may take as long as 30 hours or more to complete. These are highly technical in nature and consist of the inspection of a number of small individual items that in the aggregate state the overall condition and compliance record of the particular operation being examined. The inspection program has provided significant results in assuring both safe operations on the OCS as well as assuring that environmental concerns are protected.

In late FY 1984, the MMS approved the Offshore Inspection Program Handbook. The Handbook requires that documented procedures be developed for all aspects of the inspection program. In addition, the Handbook requires the establishment of a formal "Internal Review" process so that all elements of the MMS offshore inspection program are reviewed at least annually. With the establishment of the formal documented program and the Internal Review followup, the MMS inspection program will be implemented in a more consistent and effective manner on a national basis. Full implementation of this program will be completed in FY 1986.

Oilspill Containment and Cleanup Activities. The Minerals Management Service is a member of an Interagency Committee (including the Canadian Government) which funds the evaluation of oilspill containment and cleanup equipment and methods. Testing is conducted both offshore and at the Oil and Hazardous Materials Simulated Environmental Test Tank (OHMSETT) facility under open ocean and broken ice conditions. Information is used to quantify the effectiveness of manufactured equipment and alternative methods and is provided to MMS managers to assist in the evaluation of oilspill contingency plans which must be developed by industry.

Reserve Inventories

The Reserves Inventory Program was initiated in FY 1977 to develop and maintain accurate, up-to-date estimates of Federal OCS oil and gas reserves in developing and developed fields. This program was later mandated by the OCS Lands Act Amendments of 1978 (OCSLAA) (PL 95-372) Section 606(a)(1). Reserve inventories are generated from well and reservoir data supplied by leasehold operators. Data are tabulated by individual field, reservoir, and lease holdings. A computerized storage and retrieval system, referred to as the Field and Reservoir Reserve Estimates (FRRE), has been developed to accomplish the detailed information analyses required in this program. This system updates estimates and provides current reserve statistics for publication.

During FY 1987, MMS will enter its sixth operating year. The agency's experience in regulation of offshore operations, coupled with ongoing program and management initiatives has resulted in a more efficient organization that can better utilize available personnel and program resources. Consolidation of regional office permit staffs in the Gulf of Mexico allows for a proposed reduction of $182,000 and 5 FTE. The Regulatory Program will continue to maintain each work unit at the same level as before in accordance with the provisions of the Outer Continental Shelf Lands Act, as amended, and the Coastal Zone Management Act, as amended.

Distribution of change by object class

The object class detail for the proposed change is as follows:

	FTE	Amount ($000)
Personnel Compensation	-5	-155
Personnel Benefits		-27
Total		-182

Technology Assessment and Research (TA&R)

Objectives

- To conduct independent review of OCS technologies to identify technology gaps and to ensure the use of the Best Available and Safest Technologies (OCSLAA Section 21(b)-BAST). The program provides industry and Minerals Management Service personnel a continuing exchange of information on operational technologies.

- To provide a single point technical source within the Minerals Management Service for other Federal agencies which have special proficiencies in the various offshore technologies.

- To recognize and evaluate the various levels of operational risk involved in the development of OCS minerals.

- To assist in the development of technical and operational requirements for leaseholders to ensure safe, pollution-free operations. These requirements are incorporated in OCS orders, regulations, and the conditions for granting permits.

Basic Program

Offshore operations conducted by oil and gas lessees and monitored by the Minerals Management Service are becoming increasingly involved in pioneering efforts in a number of complex technologies as exploration and production operations move into deeper and more hostile marine environments of the continental shelf and the ice infested Arctic. The Technology Assessment and Research Program provides a comprehensive technological base for the Minerals Management Service in the supervision of leasehold operations. This support is stated within the OCS Lands Act Amendments of 1978 (OCSLAA), Section 21, that requires the use of the Best Available and Safest Technologies (BAST) on all offshore operations. The program also provides timely technical data for the determination of reliability and risks associated with equipment or design features on leasehold operations.

The Technology Assessment and Research Program operates through contracts with universities, private firms, and government laboratories. It takes advantage of participatory or collaborative studies with industry, other agencies, and with other countries such as Canada, the United Kingdom, and Norway, where similar operations, programs, and concerns exist.

Examples of activities and accomplishments include:

1. The development of improved blowout prevention procedures for deepwater drilling operations.

2. Collaboration with Canadian and Norwegian Governments on the development of subsea collection technology for oil emanating from blowing wells. Preliminary work on the "Steel Sombrero" concept used on the IXTOC-I blowout in Campeche Bay, Mexico, 1979, has led to new concepts applicable to under ice collection and to conditions where excess gas could render the original "Sombrero" system ineffective.

3. Development of data to provide vibrational fatigue (strumming) information concerning marine risers and compliant structures situated in high current regions of the ocean. This information is being used to critique leaseholders' operation plans in frontier areas.

4. Development, in collaboration with industry, of a program to obtain technical information to verify structural integrity for structures subjected to ice loadings in the Beaufort Sea.

5. Determination that an operational failure of a mooring system was based on a design which used insufficient data and an inadequate computer program. New studies are directed toward providing Minerals Management Service personnel with adequate guidelines to determine reliability of operator proposals for mooring systems.

6. Oilspill containment and clean-up technologies are being investigated in collaboration with North Sea and Canadian Government agencies. These projects supplement the evaluation of equipment described in the base program.

7. Investigations on the behavior of spilled oil in a range of conditions for development of a predictive base relative to what will be encountered as a result of a spill. This program correlates closely with item 6 above.

8. Conducts international workshops on issues such as the application of risk assessment for offshore operations.

Selected program outputs for the Technology Assessment and Research program are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Technological Investigations	11	11	9	-2
Technological Assessments	2	3	3	--
Technology Seminars Conducted	2	2	2	--
Technical Reports Published	2	1	1	--

Decrease from 1987 Base

(Dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
($)	1,164	864	-300
(FTE)	(5)	(5)	(--)

The Technology Assessment and Research (TA&R) Program provides the formal technology base for use by the Department of the Interior for the proper and timely management of leasing and mineral operations on the OCS. A large number of studies have been completed over the past several years which have greatly expanded the technical and engineering information available to the Offshore Regulatory Program. This reduction is proposed as a result of the expanded data base available and will be implemented by narrowing the range of topics which will be addressed and by reducing the scope of some studies.

The following general guidelines will be applied:

1. Analyses of subject areas will be less intensive; project report writing and distribution will be reduced.

2. MMS independent confirmatory research will be decreased, but efforts will be made to maximize participation in industry projects.

By adopting the above actions, and by maximizing MMS participation in industry projects, the TA&R Program will maintain its support to the Regulatory Program and its technical dialogue with the industry, thereby assuring continuity in fulfilling the Program's objectives.

Distribution of change by object class

The object class detail for the proposed change is as follows:

	Amount ($000)
Other Services	-300

Oil and Gas Information

Objectives

- Update regional Indexes to reflect new activity, as well as the 5-year OCS Oil and Gas Leasing Schedule. Each regional Index will contain a revised directory.

- Provide affected States with revisions to Summary Reports in the Atlantic, Gulf of Mexico, Pacific, and Alaska lease sale areas.

Base Program

The Oil and Gas Information Program is required by Section 26 of the OCSLAA of 1978. The Amendments and subsequent regulations (30 CFR Part 252) require that the Minerals Management Service provide governors of affected States and, upon request, executives of affected local governments and other interested parties, data and information in the form of Summary Reports and Indexes. The Summary Reports and Indexes are provided to aid States and local governments in planning for onshore impacts of OCS development and production operations. The Summary Reports and the Regional Indexes are updated annually.

Summary Reports and Indexes provide data designed to assist State and local governments in planning for the potential onshore impacts of possible oil and gas exploration, development, and production. These data are not as detailed as the Environmental Impact Statement (EIS) or Environmental Assessment (EA) documents which precede these publications, but the Summary Reports and Indexes provide the State and local government entities with more recent information. Since they appear after the lease offering, the documents concentrate on the actual leased areas rather than offered areas.

Coastal States use the Summary Reports and Indexes in differing ways depending on the level of OCS activity and the level of their own expertise. However, all States report that they rely on the Summary Reports for information and history as well as descriptions of future plans and ongoing activities. The Oil and Gas Information Program documents provide the only comprehensive OCS data and information source that is updated on a regular basis. Unlike the Environmental Impact Statements that project what might happen, at one point in the process, the Summary Reports and Indexes provide planners with a continuing overview of OCS activity and enable them to incorporate the information in their own planning processes. The Summary Report contains current information on operations, transportation strategies, and onshore facilities that are actually proposed as well as those already in the permitting process.

Selected Oil and Gas Information Program outputs are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Annual Update of Regional Indexes and Summary Reports --------	12	8	4	-4

Publications scheduled for a given fiscal year are subject to change due to other significant events, such as lease exploration, discoveries, or unanticipated changes in the 5-year OCS Oil and Gas Leasing Schedule.

Decrease from 1987 Base

(Dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
($)	1,164	864	-300
(FTE)	(7)	(7)	(--)

The proposed decrease in the Oil and Gas Information Program is made possible by consolidating program outputs. Regional Summary Reports and Regional Indexes have historically been published separately. Since the information in these reports is often distributed to many of the same users, it has been determined that the two publications can be combined. By implementing this change the number of reports will be reduced from eight (plus revisions) to four documents per year--one for each region. Since the reports are prepared primarily through contract support, annual savings of $300,000 can be realized through this management action. Support and information available to the public will continue to meet all statutory requirements.

Distribution of change by object class

The object class detail for the proposed change is as follows:

	Amount ($000)
Other Services................................	-300

Activity Summary

Activity: Royalty Management

(In thousands of dollars)

Subactivity	FY 1985 Actual	FY 1986 Appropriation Enacted	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Mineral Revenue Collections	12,294	15,079	14,370 1/	14,893	14,893	--
Mineral Revenue Compliance	10,050	10,463	10,013	10,382	10,382	--
Systems Development and Operation	16,524	19,448	18,612	19,434	17,234	-2,200
Total	38,868	44,990	42,995 1/	44,709	42,509	-2,200

The Royalty Management Program (RMP) is responsible for the accurate and timely determination, collection, accounting for, and distribution of all royalty and other revenue from Federal, Indian, and Outer Continental Shelf lands leases. The program remains a major source of revenue to the Federal Government and to Indian Tribes and allottees and to those States which share in revenues from Federal onshore mineral leases.

Figure 4 is a flowchart of the major functions of the Royalty Management Program. All accounting operations are located in the Lakewood Accounting Center to provide efficiency and economies of scale in the collection process and to assure consistent guidance to lessees and operators. However, functions are clearly separated to provide essential counterchecks for proper internal control (see Mineral Revenue Collections subactivity). Auditors are located geographically close to major workload areas to provide a more efficient audit capability (see Mineral Revenue Compliance subactivity). A systems function is responsible for the development, operation, and maintenance of the complex automated systems (see Systems Development and Operation subactivity).

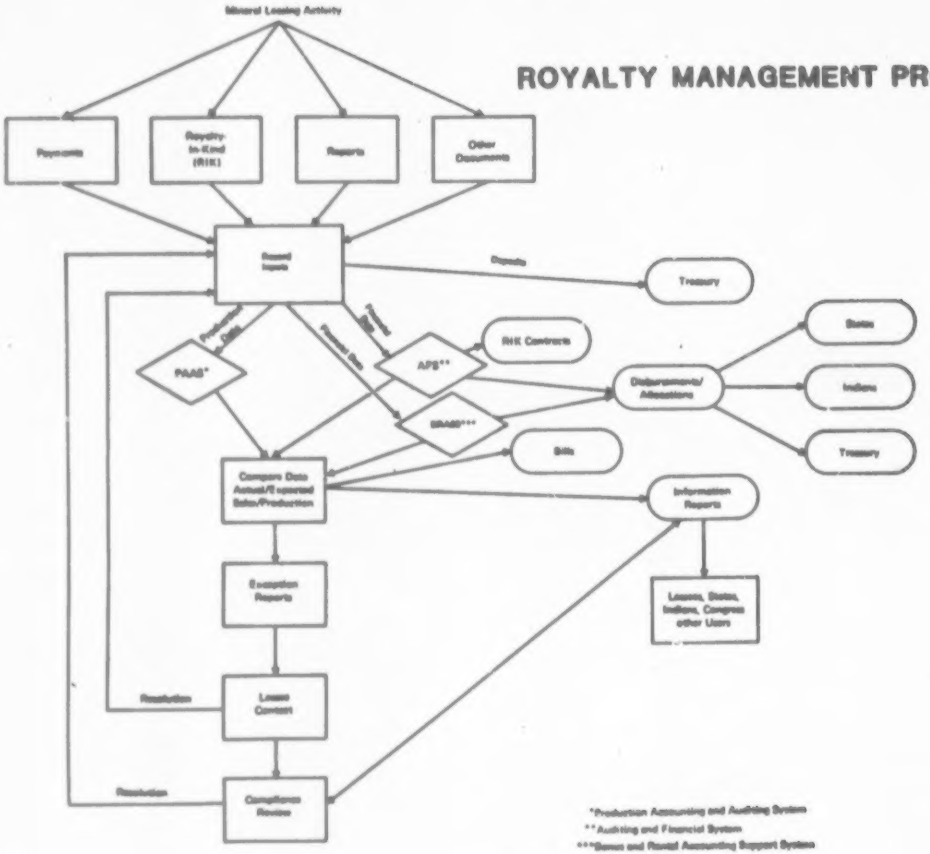
Based on the Royalty Management Action Plan published in April 1985, major programmatic and management changes have taken place during FY 1985 and are occurring in FY 1986. Among the most important of these changes are:

- o Relocation of the headquarters for Royalty Management from Washington, D.C., to Lakewood, Colorado, to place the decisionmaking authority geographically closer to the States, Indians, and industry with the resources to promptly address their concerns.

1/Reflects a realignment of an ADP security function ($63,000 and 1 FTE) from Royalty Management to General Administration.

- Expansion of the RMP Office of External Affairs, appointment of an Indian Ombudsman, and development of a comprehensive Outreach Program.
- Establishment of a Royalty Management Advisory Committee to assure external oversight and advice.
- Development of standards for funding of activities under Sections 202 and 205 of the Federal Oil and Gas Royalty Management Act (FOGRMA).
- Installation of new computer hardware and reimplementation of the Auditing and Financial System (AFS) onto the new hardware.
- Purging and purifying the AFS data base and concurrent realignment of the RMP staff to maintain AFS data base information on a lease or payor basis.
- Establishment of access for States and Indian tribes to MMS data systems. First, access to AFS will be provided by April, 1986. Then, PAAS and the Bonus and Rental Accounting Support System (BRASS) access will be provided upon the migration of their data bases to the new system.

ROYALTY MANAGEMENT PROGRAM


Mineral Leasing Activity
Payments
Royalty-In-Kind (RIK)
Reports
Other Documents
Record Inputs
Deposits
Treasury
Production Data
Payment Data
Financial Data
PAAS*
AFS**
BRASS***
RIK Contracts
Disbursements/ Allocations
States
Indians
Treasury
Bills
Compare Data Actual/Expected Sales/Production
Information Reports
Lessees, States, Indians, Congress other Users
Exception Reports
Lessee Contact
Resolution
Compliance Review
Resolution

*Production Accounting and Auditing System
**Auditing and Financial System
***Bonus and Rental Accounting Support System

FIGURE 4

Justification of Program and Performance

Activity: Royalty Management
Subactivity: Mineral Revenue Collections

(Dollar amounts in thousands)

Subactivity	FY 1986 Enacted To Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Mineral Revenue ($)	15,079	14,370 1/	14,893	14,893	—
Collections (FTE)	(316)	(315)	(312)	(312)	(—)
Total ($)	15,079	14,370 1/	14,893	14,893	—
Requirements (FTE)	(316)	(315)	(312)	(312)	(—)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

	FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
Mineral Revenue Collections	15,079	-646	14,370 2/

As a result of the reductions mandated in the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following actions will be taken:

- Reduction in contractual support for exception processing.
- Reduction in the size and scope of a contract for general accounting and systems advice.

Through the exception processing contract, the Minerals Management Service compares what a payor reports and pays to what the system expects the payor to report and pay. The decrease in exception processing resources will significantly reduce anticipated FY 1986 revenue collections from the review of 1983 and 1984 payments. It may be possible to cover the costs of exception processing for this period in a later fiscal year. As part of its Management Action Plan, the Royalty Management Program plans to contract with a major accounting/auditing firm for expert accounting and systems advice. However, this contract will be performed at a reduced level.

1/Reflects a realignment of an ADP security function ($63,000 and 1 FTE) from Royalty Management to General Administration.

2/Does not add across due to the realignment of $63,000.

Authorizations

30 U.S.C. 181, et seq. P.L. 66-146	The Mineral Lands Leasing Act of 1920, as amended, provides for classification and leasing of coal, oil, oil shale, natural gas, phosphate, potassium, sulfur, and sodium and the payment of bonuses, rents, and royalties on such leases.
43 U.S.C. 1331, et seq. P.L. 83-212	The Outer Continental Shelf Lands Act of 1953, as amended, extended the jurisdiction of the United States to the Outer Continental Shelf; provided for granting of leases to develop offshore energy and minerals; and provided for bonuses, rents, and royalties to be paid in connection with such leases.
30 U.S.C. 1001, et seq. P.L. 91-581	The Geothermal Steam Act of 1970 authorizes the Secretary to issue leases for the development of geothermal energy and provides for receipt sharing with the States.
30 U.S.C. 181, et seq. P.L. 97-78	The Combined Hydrocarbon Leasing Act of 1981 provides for combined hydrocarbon leases and receipt sharing with the States for such leases within their boundaries.
30 U.S.C. 1701, et seq. P.L. 97-451	The Federal Oil and Gas Royalty Management Act of 1982 provides for comprehensive fiscal and production accounting and auditing systems to provide the capability to accurately determine oil and gas royalties, interest, fines, penalties, fees, deposits, and other payments owed, and to collect for such amounts in a timely manner.

Mineral Revenue Collections

Objective

- To efficiently carry out the provisions of the legislation providing for collection and distribution of mineral revenues. In particular, the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA), requires the timely collection of revenues due, the detection of incorrect payments, and the enforcement of the penalty and assessment provisions for noncomplying royalty payors and reporters.

Base Program

The Mineral Revenue Collections subactivity provides funds to collect, process, account for, and distribute bonuses, rents, royalties, penalties, interest, associated fees, and other payments received by the Minerals Management Service. This activity also supports the review and calculation of windfall profit taxes.

In addition, this subactivity provides funds for the Royalty-In-Kind (RIK) Program, which was instituted to provide a long-term secure supply of crude oil at a reasonable price to small, independent refiners. MMS has extended all offshore RIK contracts to July 1, 1986. Also, starting in 1985, MMS began charging a fee to recover the administrative costs of the RIK Program on all new and extended contracts. The fees recovered in this manner are deposited in the General Fund of the Treasury Department. With each contract extension or new sale, the RIK contracts will be amended to include a new article containing the agreement that an administrative fee will be charged and paid. By January 1, 1987, all RIK contracts will contain the fee provision, and the Treasury will recover one-twelfth of program costs each month.

Accurate and efficient collection of royalties is an important matter of equity and good government. In FY 1987, it is estimated that the Royalty Management Program will collect and account for approximately $6.6 billion in mineral leasing revenues. Undercollection of current royalties due can result in losses of millions of dollars to the Federal Government, States, and Indian tribes. The Royalty Management Program has been developed to minimize potential undercollections and will continue to work toward increasing the efficacy of collection and reporting mechanisms in FY 1987.

The collection of mineral revenues in part mirrors the complex business and accounting practices of the energy industry which is primarily responsible for reporting and paying royalties and other revenues to the Government. Recent trends in this industry which have impacted the royalty collection process and increased its complexity are as follows:

- Corporate consolidations and mergers have significantly increased the number of lease reassignments. This in turn has impacted the reference database maintenance workload by requiring additional revisions to the payor information forms.

- The number of energy companies ceasing business operations has increased substantially. The RMP must assure that the Government's interest is protected in these cases and that all feasible steps are being taken to recover revenues due the Government.

- The restructuring of energy markets over the last 2 years has created a large number of complex ownership patterns which have complicated the royalty paying and collection process.

For the MMS staff to carry out their objective of accurate and timely collection and disbursement of mineral revenues, three systems have been developed. They are the Auditing and Financial System (AFS), the Production Accounting and Auditing System (PAAS), and the Bonus and Rental Accounting Support System (BRASS). The operation and maintenance of these systems is supported under the Systems Development and Operation subactivity. The primary user of the information and data provided by the system however, is the staff funded through the Mineral Revenue Collections subactivity. These systems and their functions are detailed below.

Auditing and Financial System (AFS)

This system was developed to replace the Royalty Accounting System (RAS) which had been in use for 30 years. AFS was designed to fulfill eight principal objectives: (1) Process royalties reported by the payors promptly and efficiently; (2) distribute mineral revenues to State, Indian, and General

Treasury accounts on a monthly basis in accordance with the FOGRMA; (3) calculate, distribute, and disburse interest and penalty payments to States and Indians in those instances where it is required by FOGRMA; (4) identify, using data provided by the payors, underreporting and nonreporting at a level of detail which enables MMS to effectively and quickly communicate with payors and promptly collect revenues due; (5) account for all mineral revenues due, collected, and disbursed in a system of accounts which enhances MMS's ability to control and report on the Royalty Management Program; (6) provide royalty accounting and statistical information to those parties, including State and Indian tribes, which have a need for such information; (7) build and maintain a data base which can effectively be matched with production data in the Production Accounting and Auditing System; and (8) create an automated billing process for all receivables generated by the system.

Recognizing that the present hardware was clearly undersized to meet the Department's needs in mineral revenue accounting, MMS proceeded with the procurement of a new computer. As a result, the AFS is being reimplemented on the new mainframe computer during FY 1986. The contractor responsible for the reimplementation of the AFS software recently informed MMS of a 3-month slippage from the original April 1986 completion date; however, the AFS is scheduled to be operational in the new environment by early FY 1987. Following AFS reimplementation and subsequent software enhancements, the new computer will allow the AFS to run for the first time as designed, with sufficient on-line capacity to allow for interactive error correction and file updating. In FY 1987, data in the system will also be made available to States, Indian tribes, and other Interior Department users such as the Bureau of Indian Affairs (BIA) and the Bureau of Land Management (BLM).

Exception Processing: In FY 1986, MMS will initiate billings for late payments, non-respondents, royalty underpayments, and insufficient estimated payments for gas from exceptions generated by the AFS. Billable exceptions are generated by comparing what a payor reports and pays to what the system expects the payor to report and pay. Although the AFS generates these exceptions each month, a manual effort is necessary to assure that a true discrepancy exists and that the royalty payor is in fact responsible for the problem. During 1985, this exception processing was performed on a limited scale totally with internal RMP staff resources. Starting in FY 1986, exception processing is being performed primarily by contractor employees from resources enacted in the FY 1986 budget. During FY 1987, MMS expects to reach the full level of funding for contractual support of exception processing anticipated in the FY 1986 budget. It is projected that exception processing could result in net revenue increases of as much as approximately $11.1 million in FY 1986 (depending on the impact of P.L. 99-177) and approximately $14.8 million in FY 1987. This additional revenue will be shared, as appropriate, with States and Indian tribes.

Error Correction: Significant progress has been made in reducing payor error rates in the AFS and in improving payor compliance. In FY 1986, an aggressive payor training program is being continued and the Payor's Handbook (the official guide to royalty payors on how to report to the AFS) is being rewritten. Compliance with payor requirements is also being obtained through a vigorous program of assessments and penalties (i.e., for incorrect reporting and failure to submit payor information forms) levied under the provisions of FOGRMA regulations. While the revenue from these assessments and penalties is not great, the improvement in payor compliance with paying and reporting requirements can be seen as reflected in the continuing drop in payor error rate for the AFS.

As displayed in Figure 3, the percentage of rejected fatal lines (those data lines which have errors which make it impossible to accurately distribute funds) is depicted by type of data input -- tape and other than tape -- for an 18-month period. The data shows a sharp increase in the percentage of fatal lines in the month of July 1985; however, this was attributable to a single payor submitting approximately 15,000 lines with similar errors. This action was associated with a court decision affecting Federal Energy Regulatory Commission (FERC) 93 and 93A guidelines. The general trend over this time period has been a decline in the percent of total fatal lines from 17.3 percent to 6.3 percent, or a decrease in fatal lines of over 60 percent.

Electronic Funds Transfer: MMS, in an effort to run an efficient accounting operation and realize savings to the Federal Government, initiated the use of Electronic Funds Transfer (EFT). As a result of the aforementioned Administration, the use of EFT for payors will be accelerated. Regulations now in place require all payors with transactions in excess of $50,000 to use EFT. Complete EFT transition for all companies that pay at the $50,000 threshold or above is planned to be completed by April 1986. The advisability of extending EFT to lower payment thresholds, in keeping with Treasury Department standards, will then be evaluated.

Selected Program Outputs Relating to the EFT are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
EFT Exceptions Billings Issued	1,600	7,000	14,000	+7,000
EFT Reporting Error Corrections Completed	410,000	600,000	600,000	---
Industry Guidance - Written/Verbal/Telephone Inquiries	51,000	51,000	51,000	---
Checks Deposited	65,000	60,000	70,000	+10,000
Payor Information Forms Processed (New and Revised)	58,000	58,000	63,000	+5,000 1/
EFT Messages Received	2,750	4,000	4,800	+800

Production Accounting and Auditing System (PAAS)

The Royalty Management Program's automated production accounting system (PAAS) is designed to accomplish the following objectives: (1) Compare production volumes against sales data and identify variations which may indicate unpaid royalties; (2) trace mineral production from point of origin to point of sale; (3) account for all volumes produced on the lease; (4) allow MMS to contact operators "in-house" so that gradual differences in sales/production data be

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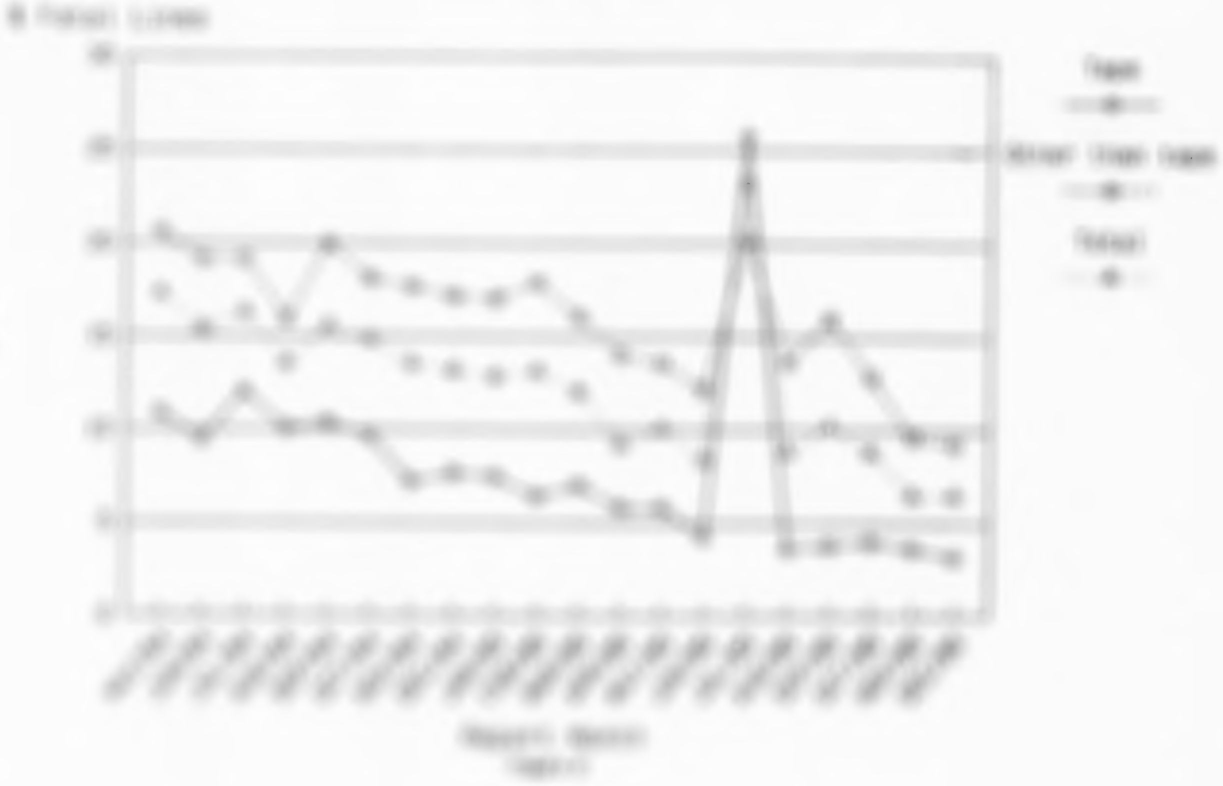
1/ Additional workload due to the conversion to EFT of smaller, quarterly interest payors from a single large payor.

ROYALTY REPORTING ERROR RATES BY TYPE OF DATA INPUT



not generate exceptions; (5) support lease management functions by allowing MMS Offshore Regional Offices and the Bureau of Land Management (BLM) field offices to access production data from each lease; (6) provide production data on a lease-by-lease basis to States and Indian tribes; and (7) facilitate comparisons of company data (production reports) with internal data (site inspection reports).

The PAAS system became operational as a pilot program in January 1984. Currently, four groups of operators have been brought into the system: (1) the original pilot operators; (2) all offshore operators (brought into the system in February 1985); (3) all coal operators; and (4) most operators for the other solid minerals.

The conversion of the remainder of onshore Federal and Indian leases has been deferred pending the completion of a study of data collected from Federal and Indian leases. At present, the system collects data on over 75 percent of all production as measured by royalties paid. Comparisons of AFS/PAAS data are being made on a regular basis and exceptions representing differences between sales and production data are being examined and reconciled. When exceptions cannot be reconciled, the operator is being contacted to assure reports are corrected and additional royalties are paid. Through December 1985, this effort has resulted in additional royalty collections of $5 million.

It is expected that decisions on proceeding with the remaining phase of conversion to PAAS will be made during the third or fourth quarter of FY 1987.

Selected Program Outputs Relative to the PAAS are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Technical Assistance				
Operators	10	15	15	--
Other DOI Offices	10	10	10	--
Error Corrections				
Reference Document Errors	3,780	5,000	5,000	--
Operation Document Errors	25,944	36,000	36,000	--
Exception Resolution				
AFS/PAAS Comparison Exceptions	600	2,400	2,400	--
Other PAAS Exceptions	3,500	12,000	12,000	--

Bonus and Rental Accounting Support System (BRASS)

Beginning in FY 1984, MMS became responsible for the collection of bonuses from onshore lease sales and rental from over 110,000 Federal onshore nonproducing leases. In order for this function to be compatible with the AFS and meet the requirements of the FOGRMA, an automated Bonus and Rental Accounting Support System (BRASS) was designed and installed and its operation began in April 1984.

The principal functions of BRASS are: (1) Collect and account for lease bonuses and create new lease records as a result of bonuses paid; (2) generate courtesy notices for annual rentals and deferred bonuses; (3) collect, deposit, and account for annual rental payments; (4) feed financial update and general ledger functions of the AFS; (5) provide rental accounting data to BLM State offices which manage the leases; (6) support monthly distribution and disbursement requirements as specified in the Royalty Management Act of 1982; and (7) provide lease data to AFS when leases go into production.

Selected Program Outputs Relative to the BRASS are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Unidentified Checks	15,600	14,000	12,000	-2,000
Delinquent Payment Follow-up	225	225	175	-50
Overpayments Researched	1,200	1,200	1,200	--
Checks Deposited	77,000	75,000	75,000	--

The PAAS and BRASS systems continue to run the same type of mini-computers originally purchased by the Minerals Management Service. The decision of possible reimplementation of either of these systems to the new mainframe has not been made.

After 3 years of operation, the RMP systems have stabilized and are performing the major functions for which they were designed. The systems have the following characteristics:

- While payor and system error rate has continued to drop toward systems integrity levels, this has required a continued resource intensive effort on the part of RMP staff.
- Ninety-eight percent of all dollars collected each month are disbursed within 30 days of receipt.
- The penalty and assessment procedures contained in the FOGRMA regulations have been helpful in reducing error rates and improving payor and reporter compliance.

Justification of Program and Performance

Activity: Royalty Management
Subactivity: Mineral Revenue Compliance

(Dollar amounts in thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Mineral Revenue	($)	10,463	10,013	10,382	10,382	--
Compliance	(FTE)	(200)	(200)	(198)	(198)	(--)
Total	($)	10,463	10,013	10,382	10,382	--
Requirements	(FTE)	(200)	(200)	(198)	(198)	(--)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

	FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
Mineral Revenue Compliance	10,463	-450	10,013

As a result of the reductions mandated in the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following actions will be taken:

- o Decrease in travel funds for Royalty Compliance auditors.
- o Decrease in funding for FOGRMA Section 202/205 activities.
- o Delay in the filling of positions for the Valuation and Standards and Compliance functions.

Since much of the auditors' workload is accomplished by traveling to different audit sites, it is anticipated that the travel decrease will reduce audit effectiveness in FY 1986. Under FOGRMA Section 202/205, MMS provides funds for cooperative and delegated audits to States and Indian tribes. Funding is also provided for an Intergovernmental Personnel Act (IPA) Program. The result of the decrease in funding for these activities in FY 1986 will be a potential further loss in audit recoveries. Filling of existing position vacancies and positions that become vacant during the remainder of FY 1986 will be delayed. The resulting decrease in staff will add to the workload of the remaining employees.

Authorizations

30 U.S.C. 181, et seq. P.L. 66-146	The Mineral Lands Leasing Act of 1920, as amended, provides for classification and leasing of coal, oil, oil shale, natural gas, phosphate, potassium, sulfur, and sodium and the payment of bonuses, rents, and royalties on such leases.
43 U.S.C. 1331, et seq. P.L. 83-212	The Outer Continental Shelf Lands Act of 1953, as amended, extended the jurisdiction of the United States to the Outer Continental Shelf; provided for granting of leases to develop offshore energy and minerals; and provided for bonuses, rents, and royalties to be paid in connection with such leases.
30 U.S.C. 1001, et seq. P.L. 91-581	The Geothermal Steam Act of 1970 authorizes the Secretary to issue leases for the development of geothermal energy and provides for receipt sharing with the States.
30 U.S.C. 181, et seq. P.L. 97-78	The Combined Hydrocarbon Leasing Act of 1981 provides for combined hydrocarbon leases and receipt sharing with the States for such leases within their boundaries.
30 U.S.C. 1701, et seq. P.L. 97-451	The Federal Oil and Gas Royalty Management Act of 1982 provides for comprehensive fiscal and production accounting and auditing systems to provide the capability to accurately determine oil and gas royalties, interest, fines, penalties, fees, deposits, and other payments owed, and to collect for such amounts in a timely manner.

Mineral Revenue Compliance

Objectives

- To provide accurate and effective product value guidance to royalty payors which will better assure that royalties paid on all products removed from Federal and Indian lands are in accord with law and regulation.

- To assure that those who report and pay to MMS are in compliance with statutes and regulations governing royalty payments and that revenue due from mineral production on Federal and Indian lands has been properly reported and paid.

Base Program

The Mineral Revenue Compliance subactivity consists of two major functions: (1) Valuation and Standards and (2) Compliance.

The Royalty Valuation and Standards function is responsible for providing the technical support needed by the Royalty Management Program to assure that royalties are being calculated on the fair market value of minerals produced on Federal, Indian, and Outer Continental Shelf Lands.

The Royalty Compliance function performs continuing audits of lessee and payor activities; resolution of exceptions noted through the automated royalty management systems; and special audits and reviews in support of Minerals Management Service (OCS) and Bureau of Land Management lease management activities. Audit activities delegated to States or carried out under the provisions of FOGRMA are monitored to assure that audit work is being performed in accord with consistent standards and applicable regulations and statutes.

Valuation and Standards

Royalty payments due are determined by the value of the commodity produced and the level of production reported on the lease. In the past, the product value set by industry--normally the sales price--was usually accepted as fair market value for royalty purposes. (This is also standard private practice.) The value of the commodity, however, cannot always be determined by the reported sales price. Several factors add to the complexity in determining the value of the commodity sold, such as: Vertically integrated companies selling to themselves; Government price controls; long-term sales contracts; complicated marketing agreements; and complex relationships among the various owners and operators of producing leases. As a result of these complexities, new product value regulations for all major royalty bearing products are under development. These will require individual interpretation in site specific cases resulting in a large number of valuation determinations. Workload in this area has continued to increase over the past 2 years.

Most actions taken by the Product Value staff are official actions of the agency, subject to administrative review through the appeals process. The table below estimates workload to be accomplished by the Valuation and Standards Division in FY 1986 and 1987.

Selected Program Outputs for Valuation and Standards are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Valuation Determinations	166	170	170	--
Advice and Assistance	293	300	300	--
Processing Allowance Applications Reviewed	273	290	290	--
Transportation Allowance Applications Reviewed	309	325	325	--
Appeals of Royalty Valuation Determinations	35	40	40	--

Compliance

Since the inception of the MMS audit program in October 1981, about $216 million has been recovered in previously unpaid or underpaid royalties. In the 61 years prior to that time, audit collections totaled $33.6 million, less than one quarter of 1 percent of all the royalties paid during that period.

The delegation of audit authority to eight States under the provisions of Section 205 of FOGRMA has brought a change in audit strategy and approach for the MMS compliance program. With a Federally funded audit effort underway in States containing over two-thirds of Federal onshore leases, the Department has delegated compliance audit activities except for potential criminal matters. The MMS audit effort has in turn, been focused largely on offshore lease activity and the audit of Indian leases. Moreover, the number of manual production audits onshore is being increased in FY 1986. This combined compliance audit approach will not only provide greater assurance of compliance, but will assist in verification of production from onshore leases.

The Royalty Compliance Program audit strategy covers the following areas: (1) Residency audits; (2) State and tribal audit activities; (3) exception resolution; (4) litigation support; and (5) referrals and requests from other organizations and; (6) Indian audits.

Residency Audits

MMS maintains "on-site" audit staffs located as residents at individual major companies. These audit teams are responsible for:

- Conducting ongoing audits of the company's royalty payment and reporting activities, providing guidance and technical assistance to the company in reporting through MMS accounting and auditing systems, and resolving policy and procedural questions which may arise.
- Resolving exceptions identified by the Auditing and Financial System, (AFS), the Production Accounting and Auditing System (PAAS), and the Bonus and Rental Accounting Support System (BRASS).
- Resolving royalty payment problems identified by field operations' inspection program (for both the MMS Offshore and the BLM Onshore inspection programs), OIG, or other sources.
- Coordinating requests for information related to audit work at the company from MMS auditors and from States and tribes involved in cooperative and/or delegated audit activities.
- Conducting financial reviews of royalty rate reduction requests and making recommendations regarding acceptance or rejection.
- Performing continuous audit of the company's records covering functional areas such as valuation, allocation, production, gas plants, and accuracy of reporting.
- Identifying and resolving special problems unique to individual leases.

The residency audit approach is cost-effective, considering the large dollars involved. In addition, as previously stated, the residency audit approach accomplishes another important purpose by coordinating all requests for information related to audit work (including requests from States involved in joint or delegated audit activities) through the central point of the team manager of the Residency Audit team. This reduces the impact on a payor company, eliminates overlap, and provides the assurance that the Department is conducting its audit activities in a planned and efficient manner.

By the beginning of FY 1987, RMP will have residency audits in place at the 13 largest royalty payors responsible for the payment of 75 to 80 percent of all royalties. The major focus of the residency program has been on the follow-up to findings contained in the lookback audit reports. To date, over $10.1 million in lookback audit findings have been collected. The resident audit force also reviews refund requests from the company. During FY 1987, it is expected that the residency audits will begin to focus on exceptions emanating from the AFS and PAAS systems.

State and Tribal Audit Activities

By the end of FY 1985, eight States (Alaska, California, Colorado, Montana, Oklahoma, North Dakota, Utah, and Wyoming) had executed delegated audit agreements under the provisions of Section 205 of FOGRMA. One Indian tribe, the Navajo, has executed an agreement under the provisions of Section 202.

These audit activities are expected to continue through FY 1987. In addition, two other tribes, the Southern Utes and the Jicarilla Apaches and the State of New Mexico have non-funded cooperative audit activities underway with RMP. In all instances, audit work is performed by the State and tribal auditors under standards developed by MMS. Enforcement action is reserved to MMS staff who take action on the basis of the audit work done by the States and tribes.

The Office of State and Tribal Support in the Royalty Compliance function monitors State and tribal audit activities and provides technical assistance to States and tribes involved in the program.

Funding criteria to distribute funds under Sections 202 and 205 are planned to be developed for use in FY 1986 and subsequent fiscal years.

Exception Resolution

During FY 1987, a greater effort will be made to increase the audit effort associated with the resolution of exceptions produced by the AFS and PAAS systems. To a great extent, exceptions from these systems will be resolved by the staff supported in the Mineral Revenue Collections subactivity. However, where exceptions indicate systemic problems of a payor's compliance with the regulations, resolution of the exceptions will be referred to compliance program auditors to do a thorough review of the underlying problems causing ongoing instances of noncompliance.

Litigation Support

Litigation support is an increasing compliance workload factor which continues to grow due to the testing in court of MMS positions expressed in demand letters, implementing regulations of FOGRMA, and production valuation guidelines. Litigation support entails staff-hour intensive efforts such as responding to requests for documents, preparing responses to interrogatories, gathering statistical royalty data, preparing position papers in defense of the Government's position in appeals and legal actions, and preparing for and undergoing deposition. It is estimated that litigation support will be necessary for 140 cases during FY 1987, many of which will involve new or unique issues.

Referrals and Requests from other Organizations

Among its commitments, Royalty Compliance responds to special requests and referrals regarding potential underpayments of royalties. These requests and referrals come from the Bureau of Indian Affairs, the Bureau of Land Management, other MMS units, and industry.

Indian Audits

While Indian royalties represent less than 2 percent of the royalties collected, the workload associated with Indian royalty management is complex and resource intensive. This is particularly true in the area of audits.

The compliance function is presently devoting over 20 staff years to Indian audit activities (exclusive of litigation support and account reconciliation activities) and the resources devoted to this area are expected to increase during FY 1987. The following specific items make up the Indian audit workload.

- Audits of royalties paid on tribal lands.
- Individual allottee audits to determine that allottees have received their proper allotment of royalties.
- Joint venture audits to determine that the payout from joint tribal/industry arrangements is proper.

The Indian Self Determination Act of 1975, as well as FOGRMA, have increased MMS's audit workload. In addition, a particularly sharp increase in Indian allottee audits has occurred during FY 1985 and is expected to continue to increase during FY 1986 and 1987. Joint venture audits are also time-consuming and complex since most joint venture contracts contain unique terms which require the application of special audit techniques.

Although the cost effectiveness of audits is a general guide, there are circumstances, such as the Department's stewardship responsibilities for funds distributed to Indian tribes and allottees, that become overriding. For example, lease payments to Indian allottees may be small in dollars but critical to the individual.

Selected Program Outputs for the Compliance function are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Residency Audits	13	13	13	--
Company Audits	12	12	17	+5

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Lease/Unit Audits	57	50	60	+10
Exception Resolution Resulting in:				
- Company Audits	--	9	10	+1
- Lease/Unit Audits	--	12	15	+3
Litigation Support (Caseload)	108	120	140	+20
Cooperative Audits				
- Section 202 of FOGRMA	1	1	1	--
- Unfunded Cooperative	3	3	3	--
Delegated Audits	8	8	8	--

The increases in program outputs in FY 1987 will be accommodated through redirection from within the Royalty Compliance Program base. In FY 1987, it is anticipated that the workload associated with account reconciliation, OIG lookback audit resolution, and FERC 93/93A refund requests will be reduced. The resource savings realized will then be redirected to company audits, lease/unit audits, and litigation support.

Justification of Program and Performance

Activity: Royalty Management
Subactivity: Systems Development and Operation

(Dollar amounts in thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Systems Development and Operation	($) (FTE)	19,448 (76)	18,612 (76)	19,434 (76)	17,234 (76)	-2,200 (—)
Total Requirements	($) (FTE)	19,448 (76)	18,612 (76)	19,434 (76)	17,234 (76)	-2,200 (--)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

Subactivity	FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
Systems Development and Operation	19,448	-836	18,612

As a result of the reductions mandated in the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following actions will be taken:

- Reduction in the operations and maintenance contract.
- Decrease in the procurement of user hardware for the new mainframe computer.

The reduction to the operations and maintenance contract will result in a decrease in funding for system changes/enhancements for RMP's three operating systems. Because of the cuts, RMP will postpone all but the most critical of these improvements, resulting in diminished system effectiveness and user productivity. When MMS entered into the contract to procure the mainframe computer and reimplement the Auditing and Financial System (AFS) onto it, the intention was to expand AFS usage by allowing on-line access for activities such as error corrections, audit inquiries, and management information. The decrease in the procurement of computer terminals and printers for the new system will also affect user efficiency and system usage.

Authorizations

30 U.S.C. 181, et seq. P.L. 66-146	The Mineral Lands Leasing Act of 1920, as amended, provides for classification and leasing of coal, oil, oil shale, natural gas, phosphate, potassium sulfur, and sodium and the payment of bonuses, rents, and royalties on such leases.
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30 U.S.C. 1701, et seq. P.L. 97-451	The Federal Oil and Gas Royalty Management Act of 1982 provides for comprehensive fiscal and production accounting and auditing systems to provide the capability to accurately determine oil and gas royalties, interest, fines, penalties, fees, deposits, and other payments owed, and to collect for such amounts in a timely manner.

Systems Development and Operation

Objectives

- To maintain and operate an effective and cost efficient Automated Data Processing (ADP) environment in which the RMP systems can operate.

- To devise and manage a program for assuring that the RMP systems operate at maximum production levels to accomplish within statutory timeframes the collection and distribution of mineral revenues.

- To continually review the condition of the three automated systems to determine the need for enhancements and changes to reflect a changing operational environment and modified program requirements.

Base Program

The Systems Development and Operation subactivity provides computer and related high-technology systems support for the Royalty Management operating programs. This includes: (1) planning, designing, and installing new software systems; (2) modifying and enhancing operating systems to meet changing needs or to increase efficiency; (3) operating and maintaining the systems; and (4) determining, obtaining, installing and maintaining necessary hardware.

Planning, designing, and installing new software systems.

Royalty Management has three major operating systems. Although these systems and their functions are described in the Royalty Collections subactivity, the design, development, installation, maintenance, and hardware operations of these systems is provided for in this subactivity.

After the AFS began operation in FY 1983, it became evident that the mini-computer configuration initially purchased to handle both the AFS and PAAS would be inadequate. Hence, after a 2-year procurement process a contract was awarded in April 1985 to install a new mainframe computer and to reimplement the AFS applications software on the new computer. The leasing costs associated with the new computer are included in the FY 1987 base.

Modifying and enhancing operating systems to meet changing needs or increase efficiency.

All three RMP systems continue to need enhancement and software modification as the systems operate in the production mode. In the case of the AFS, the system will have been "frozen" for 19 months during the software reimplementation process. Many user changes were pending at the time the reimplementation process started and many other improvements have been identified since. It is estimated that over 300 enhancements to the AFS will be ready to be made when the AFS becomes operational in the mainframe environment. These enhancements will be assigned priorities and made ready for development. Most of the changes will improve the production cycle or produce reports in the mainframe operating environment which were not possible on the mini-computer configuration.

Enhancement of the BRASS and PAAS systems is also an ongoing process as these systems develop new or different user needs once they have been in the production environment for a period of time. These improvements, or enhancements, make the system run better and, in the long run, minimize the further escalation of operational costs by improving hardware, software and user efficiency.

A major element of the Royalty Management Action Plan was to improve access of States and Indian tribes to data available on the MMS systems. By about April 1986, AFS data will be made available to States and Indian tribes from State or tribal leases. Equipment will be provided to selected Indian tribes and States to allow interaction with the MMS computer. Training will be provided so that full use of the data can be realized. Funding for this effort initiated in FY 1986 has been reduced in FY 1987 (see decrease statement). The remaining funding is required to cover the costs of telecommunications and system operation and maintenance.

Operating and maintaining the systems.

As additional functions and payors/reporters are placed in operation, the operations and maintenance function takes on increasing importance. The operations and maintenance function is performed by contract. Services encompass the following:

- Computer operations - Computer operations will be performed in two environments during FY 1987. The mainframe computer will run the AFS software, while a mini-computer configuration will run the PAAS and BRASS software.

- Data entry - Data entry and data validation services for all three systems.

- Software maintenance - Maintenance of all applications code and support systems code, systems testing and the installation of fully tested software into the production mode.

- Additional support services - In addition, support services such as micrographics, reproduction, tape storage, and similar services are provided.

The Royalty Management Program systems are complex to maintain and operate, considering the amount of data stored, manipulated, and processed and the number of integrated programs which are used during each monthly processing cycle.

Determining, obtaining, and installing necessary hardware.

Systems capacity and program requirements have changed frequently since the improved systems design began a few years ago. The systems development staff must continually examine the adequacy of current hardware in meeting the short- and long-term needs of the Royalty Management Program. This staff is responsible for determining the need for, acquiring, and installing any necessary equipment.

Decrease from 1987 Base

(Dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
($)	19,434	17,234	-2,200
(FTE)	(76)	(76)	(--)

Computer Operations and Maintenance (-$1,500,000)

During FY 1986, RMP is utilizing three contractors to operate and maintain its automated systems. These contractors operate the three RMP systems (AFS, PAAS, and BRASS) on a total of six mini-computers plus a mainframe computer. In FY 1987, with the reimplementation of the AFS completed, RMP will eliminate the need for one of the computer sites. The net savings from this streamlining is anticipated to be $1.5 million in operations and maintenance (O&M) costs.

Computer Hardware Leasing Costs (-$200,000)

The FY 1986 leasing costs of the new mainframe computer are estimated to be $3.5 million, while in FY 1987 these costs are projected to decrease to $3.3 million. The decrease of $200,000 is scheduled in FY 1987 as part of the 5-year lease purchase agreement for the mainframe computer and related equipment.

State and Tribal Support System Costs (-$500,000)

In FY 1986, the RMP is designing, developing, and installing the State and Tribal Support System (STATSS), a remote access system to enable States and Indians to obtain MMS automated data. As a result of non-recurring costs for initial design and equipment purchases, a savings of $500,000 is expected in FY 1987.

Distribution of change by object class

The object class detail for the proposed change is as follows:

	Amount ($000)
Other Services..	-2,000
Equipment..	-200
Total	-2,200

Activity Summary

Activity: General Administration

(In thousands of dollars)

Subactivity	FY 1985 Actual	FY 1986 Appropriation Enacted	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Executive Direction	3,278	3,259	3,119	3,223	3,223	--
Administrative Operations	9,995	9,408	9,064 1/	9,392	9,392	--
General Support Services	9,846	9,787	9,366	10,614	11,447	+833
Total	23,119	22,454	21,549 1/	23,229	24,062	+833

The General Administration activity provides support for the program responsibilities of MMS and is divided into three subactivities: Executive Direction, Administrative Operations, and General Support Services.

Executive Direction. The Executive Direction subactivity provides budget authority for the Office of the Director and immediate staff, the Office of Congressional and Legislative Affairs, the Office of Minerals Management Information, the Office of Equal Employment Opportunity, and the Office of the Assistant Director for Program Review. These functions provide for overall program leadership, direction and policy guidance, budget formulation and execution, program review and evaluation, and management coordination of all the responsibilities of MMS.

Administrative Operations. The Assistant Director for Administration is responsible for the administrative activities of MMS. These administrative functions include financial management; personnel management and training; safety and health program management; procurement; property and space management; office services; personnel and physical security; and information resources management functions, such as automated data processing, management analysis, records and paperwork management, and printing. In carrying out these responsibilities, the Assistant Director is supported by four headquarters divisions and three Field Administrative Service Centers. The four headquarters divisions are Financial Management, Personnel, Procurement and General Services, and Information Resources Management.

General Support Services. The General Support Services activity includes funding for costs such as Federal space rental, Federal Telecommunications System (FTS), postal services, commercial communications, and support services for all of MMS.

1/ Reflects a realignment of an ADP security function ($63,000 and 1 FTE) from Royalty Management to General Administration.

Justification of Program and Performance

Activity: General Administration
Subactivity: Executive Direction

(Dollar amounts in thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Executive Direction	($) (FTE)	3,259 (70)	3,119 (70)	3,223 (69)	3,223 (69)	-- (--)
Total Requirements	($) (FTE)	3,259 (70)	3,119 (70)	3,223 (69)	3,223 (69)	-- (--)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

Subactivity	FY 1986 Enacted To Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
Executive Direction	3,259	-140	3,119

As a result of the reductions mandated by the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following impacts are expected:

- Filling of existing position vacancies and positions that become vacant during the remainder of FY 1986 will be delayed. The resulting decrease in staff will add to the workload of the remaining employees.

Authorization

Secretarial Order No. 3071	The order established the Minerals Management Service under authority provided by Section 2 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262).

Executive Direction

Objectives

- Provide executive leadership, policy direction, and program management for all responsibilities of the Minerals Management Service.

Base Program

The Executive Direction activity is comprised of the Director and immediate staff, Office of Congressional and Legislative Affairs, Office of Minerals Management Information, Office of Equal Employment Opportunity, and the Assistant Director for Program Review, and support staff.

The Office of the Director is responsible for providing general policy guidance to and management of the organization.

The Office of Congressional and Legislative Affairs serves as the primary point of contact between the Minerals Management Service and the Congress and provides information and assistance in response to inquiries by Members of Congress or congressional staff and committee personnel. Specifically, the Office evaluates, or coordinates the evaluation of, legislative proposals affecting MMS responsibilities, maintains continuing communication regarding programs and policies, items of legislative action, statements of positions on matters under consideration by the Congress, legislative initiatives, preparation and coordination of testimony for witnesses, coordinating arrangements for congressional authorizing committee hearings and meetings, and congressional activity that affects or may affect the Minerals Management Service.

The Office of Minerals Management Information provides advice to the Director and other officials on policy and procedures for disseminating information about program activities and products to the public through the press and news media. The office also prepares and distributes news releases to the print and electronic media and responds to inquiries from the media and the public or refers such inquiries to other officials. Close liaison with the Secretary's Office of Public Affairs and counterpart offices within the Department and other agencies is maintained. Guidance is provided on Freedom of Information Act activities and procedures.

The Office of Equal Employment Opportunity develops, directs, monitors, and operates the Equal Employment Opportunity (EEO) Program in compliance with the Civil Rights Act of 1964, the Equal Employment Opportunity Act of 1972, Executive Order 11478, Departmental directives, and other related statutes and orders. Specifically, these duties include the discrimination complaint system, counseling, development and implementation of equal employment opportunity and affirmative action plans, special emphasis programs, and EEO-related training. The Office also provides expertise and leadership for other civil rights matters and technical assistance to supervisors and managers.

The Assistant Director for Program Review is responsible for assuring that resources are utilized effectively in support of the missions of the Minerals Management Service. The functions of this organization include planning for and allocating budgetary resources for operating and support programs; delineating objectives; developing and evaluating policy initiatives; determining the effectiveness of management and internal controls in meeting program objectives; preparing recommended decisions in appeals arising from the decisions of operating officials; and maintaining liaison with department offices and other Government agencies regarding planning and execution and program evaluation. In carrying out these responsibilities, the Assistant Director is supported by three headquarters divisions: Budget, Internal Review, and Appeals.

Budget. The Budget Division provides analysis, policy guidance, and recommendations regarding budget and program formulation and justification; assures proper fund and staff allocation and budget execution in accordance with the law, congressional, departmental, and bureau program directives, goals, and objectives; and develops, prepares, and maintains budget data and reports. Other specific tasks include coordinating the Bureau's management by objectives program and other tracking systems; and assisting in the presentation and explanation of budget submissions to the Department, the Office of Management and Budget (OMB), and the Congress.

Internal Review. The Internal Review Division conducts evaluations of MMS programs to determine the degree of program performance and success and conducts spescial studies and analyses of Minerals Management Service programs and policies. It provides an analytical consultation and review capability within the agency to assure proper policy analysis and development of programs. It is responsible for monitoring follow-up and implementations of internal review and evaluation recommendations.

The Internal Review Division also serves as the central point of contact, control, and coordination for comments and actions resulting from General Accounting Office and Office of the Inspector General reports. The development, installation, and monitoring of internal control systems to prevent fraud, waste, and abuse is another responsibility as prescribed in the provisions of OMB Circular A-123.

Appeals. The Appeals Division is responsible for the administration of the appeals process within the MMS through direct staff support of the appellate responsibilities of the Director (and the Deputy Assistant Secretary for Indian Affairs when Indian lands or other matters are involved) pursuant to 30 CFR Part 290 - Appeals Procedures. Specifically, the Division of Appeals is the authorized representative of the Director for the purpose of reviewing, considering, and preparing recommended decisions on matters within the jurisdiction of the MMS in accordance with existing policies, regulations, and procedures involving appeals from final orders or decisions of MMS officials. These responsibilities include program and policy liaison and coordination between the various MMS programs, other Bureaus and Department offices, and various segments of the Federal Government and the private sector.

Justification of Program and Performance

Activity: General Administration
Subactivity: Administrative Operations

(In thousands of dollars)

Program Elements		FY 1986 Enacted to Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
Administrative Direction and Coordination	($)	184		184	184	--
	(FTE)	(4)		(4)	(4)	(--)
Financial Management	($)	966		962	962	--
	(FTE)	(25)		(25)	(25)	(--)
Personnel Management	($)	1,293		1,288	1,288	--
	(FTE)	(35)		(35)	(35)	(--)
Procurement and General Services	($)	1,877		1,846	1,846	--
	(FTE)	(52)		(51)	(51)	(--)
Information Resources Management	($)	1,805		1,863	1,863	--
	(FTE)	(35)		(36)	(36)	(--)
Field Administrative Services	($)	3,283		3,249	3,249	--
	(FTE)	(75)		(74)	(74)	(--)
Total Requirements	($)	9,408	9,064 1/	9,392	9,392	--
	(FTE)	(226)	(227)	(225)	(225)	(--)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

Subactivity	FY 1986 Enacted to Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
Administrative Operations	9,408	-407	9,064 2/

As a result of the reductions mandated by the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following impacts are projected:

1/ Reflects a realignment of an ADP security function ($63,000 and 1 FTE) from Royalty Management to General Administration.

2/ Does not add across due to transfer of $63,000.

- o Filling of existing position vacancies and positions that become vacant during the remainder of FY 1986 will be delayed or deferred, resulting in increased workload for the remaining staff and potential delays in providing administrative support and services to operating programs.
- o Conversion to MMS's computers of three administrative systems currently operated by another agency through a reimbursable agreement will be delayed. The purchase of supplies and equipment, such as software and terminals, which will be required after the conversion will also be postponed.
- o Training of employees in technical and administrative areas will be minimized throughout the administrative divisions and service centers.
- o Field visits by headquarters personnel to provide guidance and administrative oversight to the field administrative service centers will be reduced. Other less effective means of communication, such as conference calls, will be relied on more to accomplish the same purpose.

Authorizations

31 U.S.C. 65 P.L. 84-863	Budget and Accounting Procedures Act of 1950
31 U.S.C. 3901-3906 P.L. 97-177,452	Prompt Payment Act of 1982
31 U.S.C. 3512(c) P.L. 97-255	Federal Managers' Financial Integrity Act of 1982
5 U.S.C. 552 P.L. 89-487, 93-502	Freedom of Information Act of 1966, as amended
P.L. 98-502	Single Audit Act of 1984
41 U.S.C. 35-45 P.L. 74-846	Walsh Healy Public Contracts Act of 1936
41 U.S.C. 351-357 P.L. 89-286	Service Contract Act of 1965
41 U.S.C. 601-613 P.L. 95-563	Contract Disputes Act of 1978
44 U.S.C. 35 P.L. 96-511	Paperwork Reduction Act of 1980
44 U.S.C. 2101 P.L. 81-754	Federal Records Act of 1950
40 U.S.C. 486(c)	Federal Acquisition Regulation of 1984

31 U.S.C. 3501 P.L. 93-597	Privacy Act of 1974
31 U.S.C. 3501 P.L. 97-452	Accounting and Collection
31 U.S.C. 3711,3716-19 P.L. 97-452	Claims
31 U.S.C. 1501-1557	Appropriation Accounting
5 U.S.C. 1104 et seq.	Delegation of Personnel Management Authority
31 U.S.C. 665-665(a)	Anti-Deficiency Act of 1905, as amended
41 U.S.C. 252 P.L. 98-369	Competition in Contracting Act of 1984
18 U.S.C. 1001	False Claims Act of 1982
18 U.S.C. 287	False Statements Act of 1962
41 U.S.C. 501-509 P.L. 95-224	Federal Grant and Cooperative Agreement Act of 1977
41 U.S.C. 253	Federal Property and Administrative Services Act of 1949
41 U.S.C. 401 P.L. 98-191	Office of Federal Procurement Policy Act of 1974, as amended
15 U.S.C. 631 P.L. 85-536	Small Business Act of 1953, as amended
15 U.S.C. 637 P.L. 98-72	Small Business Act Amendments of 1978
10 U.S.C. 137 P.L. 98-577	Small Business and Federal Competition Enhancement Act of 1984
15 U.S.C. 638 P.L. 97-219	Small Business Innovation Research Program of 1983
10 U.S.C. 2306(f)	Truth in Negotiations Act of 1962

Administrative Operations

Objective

o Provide continuing administrative direction and coordination to support the technical and mineral revenue collection programs of the MMS.

Base Program

The Administrative Operations subactivity consists of the following functions: Administrative Direction and Coordination, Financial Management, Personnel Management, Procurement and General Services, and Information Resources Management. These functions are directed and carried out at headquarters and nationwide through three Field Administrative Service Centers (ASC's).

Administrative Direction and Coordination is carried out by the Assistant Director for Administration and his immediate staff. The staff is responsible for (1) compliance with laws relating to administrative activities; (2) the review, interpretation, and implementation of Federal executive branch administrative policies and procedures; and (3) the development of appropriate organizational guidance to assure compliance with Department, Office of Management and Budget, General Services Administration, and other executive branch administrative policies and regulations. The Assistant Director is also responsible for the oversight of administrative activities of the MMS, including financial management, personnel management and training, management analysis, management of automated data processing, procurement, property and space management, office services, records management, personnel and physical security, safety, and the printing of publications. Liaison is maintained with departmental offices in order to effect a coordinated and unified administrative program consistent with the mission and goals of the Department of the Interior. The Assistant Director for Administration provides direct administrative support to managers nationwide through three Field Administrative Service Centers.

Financial Management is performed by the Financial Management Division. The Division develops and implements policies, procedures, guidelines, and standards related to financial management and provides liaison with the Department on financial management and related activities. This program includes central coordination and control of an integrated expenditure and obligation reports system; control and implementation of cost, allotment, and general ledger accounting; voucher and claims examination and processing; and technical guidance on fiscal activities performed throughout the MMS.

Secretarial Order No. 3111, dated December 20, 1985, consolidated in the Bureau of Reclamation the payroll work of MMS and other Bureaus of the Department. The Order also assigned authority for implementation and administration of the consolidated Departmental payroll office to the Bureau of Reclamation. The physical move and consolidation of payroll personnel is scheduled for May 1986. For the remainder of FY 1986 and succeeding fiscal years, each Bureau will continue to be billed for their proportionate share of the actual cost of operating the consolidated payroll office.

Priorities for FY 1987 will continue to be incorporating user requirements in the financial management system installed in FY 1985. Further expansion of financial commitment data from field locations, a FY 1986 initiative, will be pursued to provide management with more complete information on funding status. Emphasis will also be placed on integration of a procurement management information system with the financial system. Internal control reviews and accounting system compliance reviews that are required by OMB Circular A-123 and the Federal Manager's Financial Integrity Act of 1982 will be performed in FY 1987.

Major selected program outputs for the Financial Management Division are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc.(+) or Dec.(-)
Employee Payroll Processed 1/	2,130	2,100	--	-2,100
Recording Obligations	19,500	20,000	20,000	--
Auditing & Paying Invoices	26,300	25,500	25,500	--
Auditing & Paying Travel Vouchers	9,500	9,100	9,100	--
Miscellaneous Financial Documents Processed	10,200	10,000	10,000	--
Cash Management Reports Processed	16	16	16	--
Debt Management Reports Processed	16	16	16	--
Financial Policies & Procedures Developed	10	10	10	--
Internal Reports Prepared	40	100	100	--
External Reports Prepared	60	60	60	--

Personnel Management is carried out by the Personnel Division. This organization develops and implements Bureauwide policies, procedures, guidelines, and standards relating to general personnel management; recruitment and employment; position management, classification, and utilization; training and career development; personnel planning; personnel program evaluation; labor management relations; employee relations and services; conflict of interest and ethics; incentive awards; the Federal Equal Opportunity Recruitment Program (FEORP); and public policy programs. The Division also provides assistance and guidance related to personnel matters to all levels of management in developing and administering personnel programs, as well as personnel program direction to field personnel offices. This involves day-to-day and long-range personnel planning, evaluation, and operational activities in: examining, recruitment and selection, placement, retention, pay administration, employee development, employee relations and services, labor relations, special interest programs, affirmative action, conflict of interest, motivation, discipline, performance evaluation, monetary awards, insurance and annuities, attendance and leave, appointments and processing, and a variety of personnel reports, records, and statistics. Liaison with the Office of Personnel Management, the Department of the Interior, Office of the Inspector General, and the Federal Labor Relations Authority on personnel management and related issues is required.

The Personnel Division will continue to accomplish its basic personnel support to the MMS in FY 1987. In addition, several personnel management projects and programs will receive emphasis. One personnel management evaluation is scheduled. This evaluation will cover operating practices; merit promotion and recruitment; classification accuracy; performance management; compliance with governing policies, regulations, and guidelines; management assistance activities; and personnel processing. The development of supervisors, managers, and executives will receive continued attention. Training courses in technical

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1/Per pay period.

and administrative areas will be developed for employees and supervisors. Policies, guidance, and programs will be reviewed and modified, as necessary, to meet the needs and objectives of the MMS and the Office of Personnel Management guidelines. Portions of the Minerals Management Service Manual (MMSM) have still not been completed because there have been continual changes to the Federal personnel regulations. Chapters will be developed and implemented to provide policy and guidance for use throughout the organization in FY 1987.

Selected program outputs for Personnel Management are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Positions Reviewed	550	500	450	-50
Vacancy Announcements Processed	130	125	125	--
Classification Audits Conducted and Positions Reviewed	280	275	250	-25
Personnel Actions Processed	2,230	2,000	1,800	-200
PAY/PERS Processing	2,640	2,400	2,200	-200
Employment and Financial Interest and Public Disclosure Statements Processed	2,160	2,000	2,000	--
Personnel Management Evaluations Conducted	3	2	1	-1
Personnel Policies/ Procedures Issued	60	55	50	-5
Training Requests Processed	775	800	800	--
Executive/Managerial Training Processed	175	150	150	--
Training Courses Developed/Presented	10	9	10	+1
Performance Appraisal/ Merit Pay Reviews Conducted	1,400	1,300	1,300	--
Employee Relations Cases Processed/ Guidance Given	810	825	875	+50

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Labor Relations Cases Processed/Guidance Given	180	200	200	--
Worker Compensation Cases, Incentive Awards, Beneficial Suggestions, and Retirements Processed	450	460	480	+20

Procurement and General Services. The Procurement and General Services Division develops and implements policies, procedures, and standards for the execution and administration of the MMS's procurement and general services programs. The programs are designed to ensure the formulation and implementation of practices and procedures that will produce effective, economical project results in compliance with applicable laws, regulations, and sound business decisions. Technical direction is also provided to the Field Administrative Service Centers through the issuance of policy and by field reviews and visits.

The Division is responsible for six distinct programs which will be performed in FY 1987 in support of MMS:

1. Procurement. The procurement program includes entering into and administering contracts, small purchases, grants, cooperative agreements, and interagency agreements essential for fulfilling the mission of the MMS. Other responsibilities include managing the Small and Disadvantaged Business Utilization Program and Historically Black Colleges and Universities Program; conducting procurement management reviews of field offices; conducting cost and price analyses; developing annual Advance Procurement Plans; and issuing procurement policy guidance to a variety of target groups, including private industry, senior management, contracting officers, and the Offshore and Royalty Management Programs.

2. Facilities Management. The facilities program manages or oversees 663,278 square feet of assigned space in 30 buildings in 22 cities. Other responsibilities include processing space requests, conducting space utilization surveys, processing reimbursable work authorizations, conducting annual space inventories, and issuing facilities management policy and guidelines Bureauwide. At headquarters, the program is also responsible for office moves and telephone design and ordering.

3. Property Management. The property program maintains accountability records for over 8,000 line items of personal property valued at $25 million. Specific responsibilities include conducting an annual inventory of property assigned to over 190 accountable and custodial property officers; managing a nationwide data system, including property in the possession or control of contractors; managing a printing and duplicating activity; processing property transfer requests; and issuing property policy guidance Bureauwide.

4. Security. The security program involves personnel security, physical security, and document security Bureauwide. Specific duties include requesting investigations through the Office of Personnel Management for positions designated as sensitive (e.g., background investigation for critical sensitive, top secret, and ADP I or National Agency Check for noncritical sensitive, secret, and ADP II positions) when previous investigations do not meet MMS's Manual Chapter standards on personnel security (Part 441, Chapter 1); adjudication of completed reports of investigations; granting security clearances and ADP authorizations; and conducting security investigations and physical security reviews.

5. Safety. The safety program ensures that employees are provided safe and healthful working conditions. Specific duties include conducting safety inspections of facilities, providing guidance to collateral duty safety officers Bureauwide, developing a water survival safety program, providing employees with safety training, overseeing the disposal of toxic materials, investigating accidents and incidents, and developing and implementing a safety program.

6. Office Services. The office services program supports headquarters activities. The program provides mail delivery services to five buildings in the Washington metropolitan area, airline tickets, messenger services, mail shipments, household goods, bulk shipments, etc.

Selected program outputs for Procurement and General Services are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Award Contracts	214	206	200	-6
Award Small Purchases	3,098	3,000	2,950	-50
Administer Contracts	500	500	450	-50
Conduct Procurement Management Reviews	--	1	1	--
Conduct Space Utilization Studies Layouts	3	2	2	--
Design Office Space Layouts	256	307	868	+561
Inhouse Office Moves	256	307	868	+561
Process Telephone Orders 1/	689	830	2,500	+1,670
Update Property Management Records	7,800	7,800	8,751	+951
Conduct Property Management Reviews of ASC's	3	3	3	--

1/Includes installation and removal of telephone equipment.

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Issue Individual Inventories of Controlled Property	1,600	200 1/	200	—
Review Property Survey Board Actions	55	45	45	—
Review and Adjudicate Completed Reports of Investigation	271	325	340	+15
Printing Requests	630	670	700	+30
Grant ADP Security Authorizations	194	180	180	—
Conduct Physical Security Surveys	5	36	35	-1
Conduct Safety Inspections	11	8	8	—
Investigate Accident Reports	47	50	50	—
Develop Procurement Policy Directives	17	25	30	+5
Issue Information Requests or Transmittals	83	80	80	—
Review and Adjudicate GAO/OIG/Departmental (PAM) Audit Investigations	6	5	5	—
Respond to GAO/GSA Protests	1	2	2	—

Information Resources Management (IRM). The IRM Division is responsible for direction and review of the MMS's IRM programs. These include analyses and direction for data administration and telecommunications; office automation; security of data, systems, and equipment; and maintenance and improvement of the administrative systems, such as Advanced Budget/Accounting, Control and Information System (ABACIS) and Payroll/Personnel System (PAY/PERS). Other information resources issues for which the Division has responsibility fall under the general terms of management and records analyses; studies of the MMS's organization to aid better management; and management of oversight activities for such Acts as the Paperwork Reduction Act of 1980, the Federal Records Act of 1950, the Privacy Act of 1974, and the Freedom of Information Act of 1966, as amended.

1/Inventories are issued only to supervisors/managers now rather than to individual employees.

During FY 1987, the Automated Data Processing Plan will be integrated with the 5-year ADP and Telecommunications Acquisition Plans and Exhibit 43B of the A-11 budget submission. At the same time, an analysis of existing ADP systems will be conducted to ensure accuracy, efficiencies, eliminate duplication, and reduce costs. Existing telecommunications facilities will be reviewed to improve data transmission throughout MMS. Data standards should be developed which will improve the sharing of data between Offshore Minerals Management, Royalty Management, and other Bureaus. The system life cycle management program will continue. ADP security will continue to receive major emphasis. The integration of major MMS's administrative systems also will be examined. Maintenance of and improvement to existing administrative systems, such as correspondence control and the training information management system, will be undertaken.

Management reviews, systems studies, analyses, and special projects will be conducted; for instance, one or more reviews will be conducted under OMB Circular No. A-76. The Division will continue to develop and provide advice on organization plans; provide guidance to program offices on the preparation, review, and issuance of Federal Register documents and delegations of authorities; manage the directives system; and provide policy and procedural review to ensure compliance with regulations. Emphasis will continue on efforts to aid the Bureau in meeting its Information Collection Budget.

Selected program outputs for Information Resources Management are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Maintain Administrative Systems	9	12	13	+1
Develop/Enhance (Major) Administrative Systems	3	6	6	--
Operate Systems	12	13	19	+1
Conduct Management Reviews/ Studies	9	6	6	--
Review Policy Documents (Directive System)	140	120	180	+60
Process Other Documents 1/	243	240	265	+25

1/Includes documents such as the Freedom of Information Act (FOIA), Federal Register, Information Collection Budget (ICB), and Privacy Act.

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Conduct Records Management Training	9	3	2	-1
Conduct ADP Security Reviews	2	3	3	--
Participate in Departmental IRM Projects	7	11	8	-3
Respond to Requests for ADP Data	12	12	12	--
Perform Studies of Bureau ADP/Telecommunications Operations	6	6	6	--
Prepare Planning Documents (5 yr. ADP/Telecommunication Plan)	2	2	2	--
ADP Acquisition Reviews	183	200	200	--

Field Administrative Services. Direct administrative support is provided to program managers through three Field Administrative Centers (ASC's), located in proximity to major program offices in the field. These ASC's provide services to all field activities of the MMS, except for the Atlantic OCS Region, which receives support directly from the Office of Administration in Herndon, Virginia.

The Office of the Assistant Director for Administration and the ASC's are structured to assist managers in matters related to personnel, safety, security, space and property management, procurement and contracting, information resources management activities, and financial management. The ASC's in the field operate under the direction of a service center manager who reports to the Assistant Director for Administration. The administrative service organizations and their service areas are:

Service Center	Region/Activity	Location
Office of the Assistant Director for Administration	Minerals Management Service Headquarters Atlantic OCS Region	Herndon, Virginia
Alaska Administrative Service Center	Alaska OCS Region	Anchorage, Alaska
Central Administrative Service Center	Royalty Management Pacific OCS Region	Lakewood, Colorado
Southern Administrative Service Center	Gulf of Mexico OCS Region Royalty Management	Metairie, Louisiana

Selected program outputs for the Field Administrative Service Centers are:

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Small Purchases Processed	2,638	3,060	3,270	+210
Contracts Awarded	125	167	175	+8
Contracts Administered	242	219	182	-37
Property Actions	3,889	5,850	5,660	-190
Space Utilization Studies/Layouts (work stations)	41	60	33	-27
Work Authorizations/ Building Repairs	312	490	155	-335
Telephone Connects/ Disconnects	2,247	2,400	1,350	-1,050
Safety Inspection/ Accident Reports	47	60	57	-3
Security Clearances	642	455	415	-40
Positions Reviewed	1,053	1,030	935	-95
Vacancy Announcements Processed	299	285	235	-50
Training Courses Developed	11	14	16	+2
Training Requests Processed & Reviewed	3,243	3,350	3,350	--
Personnel Actions Processed	8,057	6,500	6,500	--
Employee Relations Cases Processed	2,601	2,310	2,215	-95
PMIS Data Base Transactions [1]	4,695	5,525	5,700	+175
BPA Calls Processed [2]	3,294	3,025	3,225	+200

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[1] PMIS - Procurement Management Information System
[2] BPA - Blanket Purchase Agreement

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate	Inc. (+) or Dec. (-)
Imprest Fund Actions	1,847	2,025	2,000	-25
PAY/PERS Input	51,400	51,600	51,600	--
Reproduction Work	8,381,627	8,400,000	8,500,000	+100

Justification of Program and Performance

Activity: General Administration
Subactivity: General Support Services

(Dollar amounts in thousands)

Subactivity		FY 1986 Enacted to Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc. (+) Dec. (-) from Base
General Support Services	($) (FTE)	9,787 (--)	9,366 (--)	10,614 (--)	11,447 (--)	+833 (--)
Total Requirements	($) (FTE)	9,787 (--)	9,366 (--)	10,614 (--)	11,447 (--)	+833 (--)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

Subactivity	FY 1986 Enacted to Date	P.L. 99-177 Reduction	FY 1986 Adjusted Appropriation
General Support Services	9,787	-421	9,366

As a result of the reductions mandated in the Balanced Budget and Emergency Deficit Control Act of 1985 (P.L. 99-177), the following impacts are projected:

- o Fixed costs funded by the General Support Services subactivity will have to be accommodated by charging other areas of the MMS budget. This action can be expected to have a further negative impact on mission accomplishment in FY 1986.

The General Support Services subactivity is comprised of funding for fixed and other operational costs of the MMS. This includes such costs as the rental of space; communications; postage; reimbursable services that are provided by other bureaus, such as payroll; employees' compensation; and nonemployment compensation. All of these costs are for services essential in supporting the operating programs in achieving their goals and objectives. Therefore, a reduction of $421,000 in this subactivity will result in an assessment of the operating programs to cover any shortfall in administrative expenses. Such action would lead to the redirection of mission-related funds for support service expenses. Redirections would have programmatic impacts since the operating programs have also been reduced by 4.3 percent.

Authorization

Secretarial Order No. 3071	The order established the Minerals Management Service (MMS) under authority provided by Section 2 of Reorganization Plan No. 3 of 1950 (64 Stat. 1262).

General Support Services

Objectives

- o Provide adequate and safe work space and facilities that will contribute to the productivity and efficiency of the employees of the MMS in achieving goals and objectives.
- o Provide appropriate services to support the operating programs.

Base Program

The General Support Services subactivity includes funding for fixed costs and related support services for all of the MMS. Fixed costs include expenses for rental of office space and other required physical facilities, Federal Telecommunications System (FTS) service, and postage, etc. Rent, which is estimated at $7.366 million in FY 1987, is the payment to General Services Administration (GSA) for all Federal building space rental and associated expenses for the normal 40 hour, 5-day workweek.

Expenses for rental of office and other space requirements are based on cost projections provided by GSA. In FY 1987, existing offices in Virginia will be consolidated into one location to facilitate management and operations. Rental expenses include the costs of this consolidated space.

The FTS cost of $0.174 million is based on estimates developed by the Department. Commercial communication expenses of $0.573 million are based on FY 1986 estimates and include local and long distance telephone and telecommunications expenses for headquarters offices and the Atlantic OCS Region located in the Washington, D.C., area. Postage expense of $0.686 million is based on a postal audit that was conducted by postal officials in June 1985.

A summary of the expenses for General Support Services is displayed below:

(In thousands of dollars)

Estimated FY 1987 Expenses	Cost
Rent................................	7,366
Miscellaneous Services 1/...........	1,451

1/ Includes such expenses as reimbursable work authorizations, dedicated line for the transmittal of PAY/PERS data, office move to new location, commercial communication expenses for new location, and shuttle service, etc.

(In thousands of dollars)

Estimated FY 1987 Expenses	Cost
Postage	686
Commercial Communications 1/	573
Department of Interior Working Capital Fund Charges	420
Reimbursable Services	258
Employees' Compensation Fund	216
Federal Telecommunications System	174
Security and Overtime Utility Services 2/	167
Unemployment Compensation	136
Total	11,447

Increase from 1987 Base

(Dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
($)	10,614	11,447	+833
(FTE)	(--)	(--)	(--)

The proposed increase of $833,000 is for expenses related directly to the FY 1987 consolidation of the Washington, D.C., metropolitan area offices located in Virginia. Since establishment in 1982, MMS has operated headquarters functions in five geographically separated locations. This situation has proved difficult for communications and detrimental to efficient program management. Locating all Northern Virginia staff in a single office has been impossible due to the lack of adequate space in any one building currently occupied.

The Department and GSA have approved a proposal to acquire adequate office space in a single location for the consolidation of these employees. The consolidation is extremely important in achieving the intent of the Department in establishing MMS - to improve the management of and provide greater

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1/ For headquarters offices and the Atlantic OCS Region located in the Washington, D.C., area; other commercial communication costs are funded by the operating programs.

2/ Includes $115,000 for the purchase, installation, and monitoring of a new security system for the new headquarters office location.

management oversight and accountability for royalty management, offshore leasing, and related support activities. The consolidation will enhance communications and coordination and facilitate daily operations between program personnel by reducing the staff time required for local travel between offices. The improved communication and access to both staff and management will enable MMS to enhance the effectiveness of program planning and management and to respond to short turn-around situations. As communication and access to other headquarters program staffs is achieved, the ability to perform program functions will contribute to savings through reduced travel costs and improved information flow. The costs estimated to be incurred during FY 1987 will provide for the physical relocation, office configuration, security, and equipment and systems installations, etc. Specific cost estimates for the office space consolidation are:

Expense	Cost
Office alterations of new location and repairs to vacated office space	$310,000
Commercial communication expenses for new location	120,000
Office move to new location	103,000
Shuttle service..............................	104,000
Purchase and installation of security system..	100,000
Miscellaneous	96,000
Total...................................	$833,000

Distribution of change by object class

The object class detail for the proposed change is as follows:

	Amount ($000)
Other Services..................................	833

Summary of Requirements by Object Class

(Dollar amounts in thousands)

Appropriation: Minerals and Royalty Management	1987 Base		1987 Estimate		Inc. (+) or Dec. (-)	
	FTE	Amount	FTE	Amount	FTE	Amount
Object Class						
11. Personnel compensation:						
11.1 Full-time permanent....................	1,883	62,403	1,850	61,385	-33	-1,018
11.3 Other than full-time permanent........	165	3,472	165	3,472	- -	- -
11.5 Other personnel compensation..........	25	1,449	25	1,449	- -	- -
11.8 Special personal services payments....	- -	74	- -	74	- -	- -
Total personnel compensation........	2,073	67,398	2,040	66,380	-33	-1,018
Other Objects						
12.1 Personnel benefits: civilian..........		10,368		10,211		-157
13.0 Benefits for former personnel.........		250		250		- -
21.0 Travel and transportation of persons.........................		3,450		3,431		-19
22.0 Transportation of things..............		479		479		- -
23.1 Standard level user charges...........		6,858		6,858		- -
23.2 Rental payments to others.............		508		508		- -
23.3 Communications,utilities and miscellaneous charges.............		4,039		4,039		- -
24.0 Printing and reproduction.............		1,863		1,863		- -
25.0 Other services........................		67,341		61,787		-5,554
26.0 Supplies and materials................		1,797		1,791		-6
31.0 Equipment.............................		2,699		2,499		-200
42.0 Insurance claims and indemities.......		4		4		- -
Total requirements.................		167,054		160,100		-6,954

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Minerals and Royalty Management
Program and Financing (in thousands of dollars)

14-1917-0-1-302	FY 1985 Actuals	FY 1986 Estimate	FY 1987 Estimate
Program by activities:			
Direct program:			
00.0101 Outer Continental Shelf Lands...	98,767	99,187	93,529
00.0201 Royalty Management..............	38,783	44,927	42,509
00.0301 General Administration..........	23,083	22,517	24,062
00.9101 Total direct program..........	160,633	166,631	160,100
01.0101 Reimbursable program............	690	1,000	2,250
10.0001 Total obligations...............	161,323	167,631	162,350
Financing:			
Offsetting collections from:			
11.0001 Federal funds...................	-690	-1,000	-1,000
14.0001 Non-Federal sources.............	- -	- -	-1,250
25.0001 Unobligated balance lapsing.....	163	379	- -
39.0001 Budget authority................	160,796	167,010	160,100
Budget authority:			
40.0001 Appropriation...................	161,718	168,018	160,100
40.0002 Reduction pursuant to PL 99-190.	- -	-1,008	- -
41.0001 Transferred to other accounts...	-922	- -	- -
43.0001 Appropriation (adjusted)........	160,796	167,010	160,100
Relation of obligations to outlays:			
71.0001 Obligations incurred, net.......	160,633	166,631	160,100
72.4001 Obligated balance, start of year.........................	69,297	69,748	58,738
74.4001 Obligated balance, end of year.........................	-69,748	-58,738	-56,362
77.0001 Adjustments to expired accounts.......................	-113	- -	- -
90.0001 Outlays.........................	160,069	177,641	162,476

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Minerals and Royalty Management
Program and Financing (in thousands of dollars)

14-1917-6-1-302	FY 1985 Actuals	FY 1986 Estimate	FY 1987 Estimate
Program by activities:			
10.0001 Total obligations...............	- -	-7,181	- -
Financing:			
40.0001 Budget Authority................	- -	-7,181	- -
Relation of obligations to outlays:			
71.0001 Obligations incurred, net.......	- -	-7,181	- -
72.4001 Obligated balance, start of year..........................	- -	- -	-2,334
74.4001 Obligated balance, end of year..........................	- -	2,334	- -
90.0001 Outlays.........................	- -	-4,847	-2,334

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Minerals and Royalty Management
Object Classification (in thousands of dollars)

14-1917-0-1-302	FY 1985 Actuals	FY 1986 Estimate	FY 1987 Estimate
Direct Obligations:			
Personnel compensation			
111.101 Full-time permanent	60,324	63,081	61,385
111.301 Other than full-time permanent	3,320	3,472	3,472
111.501 Other personnel compensation	1,386	1,449	1,449
111.801 Special personal services payments	71	74	74
111.901 Total personnel compensation	65,101	68,076	66,380
112.101 Personnel benefits: civilian	9,844	10,473	10,211
113.001 Benefits for former personnel	209	250	250
121.001 Travel and transportation of persons	3,012	3,631	3,431
122.001 Transportation of things	512	479	479
123.101 Standard level user charges	5,503	5,732	6,858
123.201 Rental payments to others	835	807	508
123.301 Communications,utilities and miscellaneous charges	3,463	4,039	4,039
124.001 Printing and reproduction	1,510	1,863	1,863
125.001 Other services	65,695	66,781	61,787
126.001 Supplies and materials	1,549	1,797	1,791
131.001 Equipment	3,339	2,699	2,499
141.001 Grants,subsidies and contributions	50	- -	- -
142.001 Insurance claims and indemities	11	4	4
199.001 Subtotal, direct obligations	160,633	166,631	160,100
Reimbursable Obligations:			
225.001 Other services	690	1,000	2,250
299.001 Subtotal, reimbursable obligations	690	1,000	2,250
999.901 Total obligations	161,323	167,631	162,350

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Minerals And Royalty Management
Personnel Summary

14-1917-0-1-302	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
Direct:			
Total number of full-time permanent positions........................	1,907	1,921	1,870
Total compensable workyears:			
Full-time equivalent employment..	2,081	2,066	2,015
Full-time equivalent of overtime and holiday hours................	25	25	25
Average ES salary..................	$68,506	$68,506	$68,506
Average GS grade...................	10.26	10.24	10.25
Average GS salary..................	$31,047	$29,694	$29,282
Average salary of ungraded positions..........................	$10,064	$10,328	$9,812

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Consolidated Schedule Of Permanent Positions
Detail Of Permanent Positions

	FY 1985 Actual	FY 1986 Estimate	FY 1987 Estimate
ES-6	3	3	3
ES-5	2	2	2
ES-4	5	5	5
ES-3	3	3	3
ES-2	2	2	2
ES-1	- -	- -	- -
Subtotal	15	15	15
GS/GM-15	69	69	67
GS/GM-14	102	102	150
GS/GM-13	360	360	353
GS-12	424	486	418
GS-11	153	175	152
GS-10	36	36	33
GS-9	116	118	115
GS-8	32	32	28
GS-7	138	136	125
GS-6	144	145	146
GS-5	155	175	152
GS-4	92	95	86
GS-3	11	10	0
GS-2	3	6	6
GS-1	2	3	2
Subtotal	1887	1961	1853
Ungraded	5	5	5
Total permanent positions	1907	1981	1873
Unfilled positions, end of year	- -	- -	- -
Total permanent employment, end of year	1907	1981	1873

Narrative Explanation of Reduction for Administrative and Overhead Activities

Minerals Management Service will reduce both funds ($783,000) and FTE (18) in FY 1987 to support the Administration's continuing efforts toward efficient and effective Federal program operations. A total of $450,000 and 10 FTE are reduced in the Offshore Program as a result of its efforts to streamline administratve and other support activities. In Royalty Management, the program management and support functions have been transferred to Lakewood, Colorado. The transfer of these functions will result in staff savings. In addition, the exercising of lease/purchase options on selected pieces of equipment will generate savings. The total savings from these initiatives are expected to total $218,000 and 5 FTE. Minerals Management Service staffs in the Executive Direction subactivity will be reduced in 1987 by 1 FTE and $46,000. The Administrative Operations' staff and budget decreases of 2 FTE and $79,000 are attributed to the implementation of the improvements in the Department of the Interior's study on administrative improvements.

(Dollar amounts in thousands)

Appropriation/Activity		FY 1986 Enacted to Date	Administrative and Overhead Reduction
Minerals and Royalty Management			
Outer Continental Shelf Lands	($)	99,566	-450
	(FTE)	(1,178)	(-10)
Royalty Management	($)	44,927	-218
	(FTE)	(591)	(-5)
General Administration	($)	22,517	-115
	(FTE)	(297)	(-3)
TOTAL	($)	167,010	-783
	(FTE)	(2,066)	(-18)

Appropriation Summary Statement

Minerals Management Service

Appropriation: Payments to States from Receipts under Mineral Leasing Act

In accordance with 30 U.S.C. 181 et seq. (the Mineral Lands Leasing Act of 1920, as amended), all States (except Alaska) are paid 50 percent of the receipts from bonuses, royalties, and rentals resulting from the leasing of mineral resources under the Act, on public lands. Alaska is paid 90 percent of the receipts from leasing outside of the National Petroleum Reserve-Alaska (NPRA). This appropriation provides for monthly payments to all States for their share of revenues realized as a result of mineral leasing activities on Federal lands within their boundaries; and for interest to States and Indian accounts when mineral leasing revenues are not disbursed by the dates prescribed in 30 U.S.C. 191 and 1714.

Appropriation Language Sheet

PAYMENTS TO STATES FROM RECEIPTS UNDER MINERAL LEASING ACT

Notwithstanding any other provision of law, in fiscal year 1987, moneys received from sales, bonuses, royalties (including interest charges collected under the Federal Oil and Gas Royalty Management Act of 1982), and rentals of the public lands under the provisions of the Mineral Lands Leasing Act of 1920, as amended, and the Geothermal Steam Act of 1970, which are not payable to a State or to the Reclamation Fund, shall be available for the payment of interest in accordance with 30 U.S.C. 1721 (b) and (d), prior to the crediting of such funds to miscellaneous receipts of the Treasury.

Justification of Proposed Language Changes

Payments to States from Receipts under Mineral Leasing Act

1. Addition:

"Notwithstanding any other provision of law, in fiscal year 1987, moneys received from sales, bonuses, royalties (including interest charges collected under the Federal Oil and Gas Royalty Management Act of 1982), and rentals of the public lands under the provisions of the Mineral Lands Leasing Act of 1920, as amended, and the Geothermal Steam Act of 1970, which are not payable to a State or to the Reclamation Fund, shall be available for the payment of interest in accordance with 30 U.S.C. 1721 (b) and (d), prior to the crediting of such funds to miscellaneous receipts of the Treasury."

The Federal Oil and Gas Royalty Management Act of 1982 requires the Government to make payments of interest to States and Indian accounts when onshore mineral leasing revenues due them are not disbursed within the timeframes prescribed by the Act. These payments from receipts under the Mineral Leasing Act cannot be disbursed until a proper determination is made of the source of all incoming royalties. Although the primary causes of delays in disbursement (payor input errors and processing errors) can be minimized, absolute eradication of errors is unlikely. The MMS currently has no source of available funds from which to pay this interest. Therefore, this language is proposed to provide for indefinite authority (since absolute amounts cannot be accurately estimated in advance) to pay the interest owed from the Federal Government's share of mineral leasing revenues received prior to credit of such funds to miscellaneous receipts of the Treasury.

Appropriation Language Citations

Minerals Management Service

Appropriation: Payments to States from Receipts under Mineral Leasing Act

1. Notwithstanding any other provision of law, in fiscal year 1987, moneys received from sales, bonuses, royalties (including interest charges collected under the Federal Oil and Gas Royalty Management Act of 1982).

   30 U.S.C. 1701 et seq.

   The Federal Oil and Gas Royalty Management Act of 1982 provides for comprehensive fiscal and production accounting and auditing systems to provide the capability to accurately determine oil and gas royalties, interest, fines, penalties, fees, deposits, and other payments owed, and to collect for such amounts in a timely manner.

2. and rentals of the public lands under the provisions of the Mineral Lands Leasing Act of 1920, as amended.

   30 U.S.C. 191 et seq.

   The Mineral Lands Leasing Act of 1920, as amended, provides for the sharing of receipts with States on a monthly basis from various mineral leasing activities on Federal lands within their boundaries.

3. and the Geothermal Steam Act of 1970.

   The Geothermal Steam Act of 1970 authorizes the Secretary to issue leases for the development of geothermal energy and provides for receipt sharing with the States.

4. which are not payable to a State or to the Reclamation Fund, shall be available for the payment of interest in accordance with 30 U.S.C. 1721 (b) and (d), prior to the crediting of such funds to miscellaneous receipts of the Treasury.

   30 U.S.C. 1721 (b) and (d)

   The Federal Oil and Gas Royalty Management Act of 1982 provides for timely payments of royalty funds from oil and gas production on Indian lands to Indian accounts and for payments of interest to States and Indian accounts when funds are not disbursed as required by 30 U.S.C. 191 and 1714.

Summary of Requirements

Appropriation: Payments to States from Receipts under Mineral Leasing Act

(Dollar amounts in thousands)

Summary of Base Adjustments	FTE	Amount	FTE	Amount
Appropriation Enacted to Date, 1986			--	574,391
Base Adjustments:				
Proposed 1986 Supplemental			--	+800
1987 Base Budget			--	575,191

Comparison by Activities	FY 1985 Actual		FY 1986 Enacted to Date		P.L. 99-177 Reserve	FY 86 Adjusted Appropriation	FY 1987 Base		FY 1987 Estimate		Inc.(+)/Dec.(-) From 1986 Enacted		Inc.(+)/Dec.(-) From 1986 Adjusted Appropriation	Inc.(+)/Dec.(-) from 1987 Base	
	FTE	Amount	FTE	Amount	Amount	Amount	FTE	Amount	FTE	Amount	FTE	Amount	Amount	FTE	Amount
Payments to States	--	537,523	--	574,391	-23,895	574,391 1/	--	574,391	--	550,686	--	-23,705	-23,705	--	-23,705
Interest on Late Payments	--	1,051	--	--	--	--	--	800	--	800	--	+800	+800	--	--
Total Requirements	--	538,574	--	574,391	-23,895	574,391	--	575,191	--	551,486	--	-22,905	-22,905	--	-23,705

1/ Includes $23.9 million in total obligations that are to be sequestered by P.L. 99-177. The $23.9 million will not be paid during 1986, but will remain in the account and will be available at a future date to the extent permitted by law.

Justification of Adjustments to Base

Payments to States from Receipts under Mineral Leasing Act

(Dollar amounts in thousands)

	FTE	Amount ($000)
FY 1987 effect of the pending FY 1986 supplemental....	---	+800

The Federal Oil and Gas Royalty Management Act of 1982 requires the Government to make payments of interest to States and Indian accounts when Federal onshore mineral leasing revenues due them are not disbursed within the timeframes prescribed by the Act. Since MMS has no source of available funds from which to pay this interest, an FY 1986 supplemental is being proposed to provide the required funding. This increase reflects the effect in FY 1987 of the pending FY 1986 supplemental request.

Justification of Program and Performance

Activity: Payments to States from Receipts under Mineral Leasing Act

(Dollar amounts in thousands)

Activity		FY 1986 Enacted To Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc.(+)/ Dec.(-) from Base
Payments to States	($)	574,391	574,391 1/	574,391	550,686	-23,705
	(FTE)	(--)	(--)	(--)	(—)	(--)

Gramm-Rudman-Hollings Impact

(In thousands of dollars)

Activity	FY 1986 Enacted To Date	P.L. 99-177 Reserve	FY 1986 Adjusted Appropriation
Payments to States	574,391	-23,895	574,391

The Gramm-Rudman-Hollings reduction will result in a decrease in revenue to the States and a corresponding increase in net revenue to the Federal Treasury (See Table 3).

Authorizations

30 U.S.C. 191, *et seq.* P.L. 66-146	The *Mineral Lands Leasing Act of 1920*, as amended, provides for the sharing of receipts with States on a monthly basis from various mineral leasing activities on Federal lands within their boundaries.
30 U.S.C. 151 *et seq.*	The *Mineral Leasing Act for Acquired Lands* provides for leasing coal, oil, oil shale, natural gas, phosphate, and sodium on acquired lands and the sharing of receipts from such leasing with the States on acquired lands within their boundaries.

1/ Includes $23.9 million in total obligations that are to be sequestered by P.L. 99-177. The $23.9 million will not be paid during 1986, but will remain in the account and will be available at a future date to the extent permitted by law.

Table 3

FY 1986 Impact of P.L. 99-177 on MINERAL REVENUE PAYMENTS TO THE STATES
(Dollar amounts in thousands)

	FY 1985 Outlays	FY 1986 Estimated Payments	Reduction Under P.L. 99-177	FY 1986 Est. Net Payments	FY 1987 Est. Net Payments
Alabama	200	214	9	205	205
Alaska	13,026	14,185	590	13,595	14,209
Arizona	1,129	1,206	50	1,156	1,155
Arkansas	718	767	32	735	735
California	41,833	44,681	1,859	42,822	42,788
Colorado	42,752	45,663	1,900	43,763	43,729
Florida	73	78	3	75	75
Idaho	3,767	4,023	167	3,856	3,853
Kansas	761	813	34	779	778
Louisiana	795	849	35	814	813
Michigan	44	47	2	45	45
Mississippi	1,073	1,146	48	1,098	1,097
Montana	21,140	22,579	939	21,640	21,623
Nebraska	320	342	14	328	327
Nevada	9,903	10,577	440	10,137	10,129
New Mexico	149,878	160,082	6,660	153,422	153,301
North Dakota	9,481	10,126	421	9,705	9,698
Oklahoma	2,916	3,115	130	2,985	2,983
Oregon	1,761	1,881	78	1,803	1,801
South Dakota	1,227	1,311	55	1,256	1,255
Utah	34,771	37,138	1,545	35,593	35,565
Washington	640	684	28	656	655
Wyoming	199,274	212,840	8,855	203,985	203,824
Minnesota	2	2	- -	2	2
Texas	11	12	- -	12	12
West Virginia	28	30	1	29	29
Subtotal	537,523	574,391	23,895	550,496	550,686
Interest on Late Payments	1,051	800	- -	800	800
TOTAL	538,574	575,191	23,895 1/	551,296	551,486

1/ The FY 1986 appropriation includes $23,895,000 in total obligations that are to be sequestered by P.L. 99-177 in the Payments to the States account. This amount will not be paid during FY 1986, but will remain in the account and will be available at a future date to the extent permitted by law.

30 U.S.C. 1001, et seq. P.L. 91-581	The Geothermal Steam Act of 1970 authorizes the Secretary to issue leases for the development of geothermal energy and provides for receipt sharing with the States.
30 U.S.C. 181, et seq. P.L. 97-78	The Combined Hydrocarbon Leasing Act of 1981 provides for combined hydrocarbon leases and receipt sharing with the States for such leases within their boundaries.
30 U.S.C. 191 P.L. 97-451	The Federal Oil and Gas Royalty Management Act of 1982 provides for monthly distribution of mineral leasing receipts to the States.

Objectives

- Provide payments on a monthly basis to the States for development of mineral resources on Federal lands within their boundaries.

Base Program

This appropriation provides for payments to all States due shares of revenues realized as a result of the leasing of minerals on Federal lands located within the boundaries of the States. Revenues for these payments are accrued from bonuses, rentals, and royalties collected from Federal onshore mineral leases. Amounts paid to States are determined in accordance with various laws which specify the percentages of revenues to be paid. The payment a State receives is determined by the total revenues received from minerals leasing and production within their boundaries. A provision of the Federal Oil and Gas Royalty Management Act of 1982 required that, effective October 1, 1983, payments be made on a monthly basis, rather than semi-annually, as had previously been the case.

The Mineral Lands Leasing Act of 1920 as amended provides that all States (except Alaska) be paid fifty (50) percent of the revenues from bonuses, royalties, and rentals resulting from the leasing of mineral resources on Federal lands within their borders. Alaska receives 50 percent of the revenues from mineral leases in the National Petroleum Reserve in Alaska (NPRA), and 90 percent of revenues from all other Alaska leases, including those on lands governed by the Alaska National Interest Lands Conservation Act (ANILCA).

Distribution to the States

The method of estimating the mineral revenue distribution to States is displayed on Table 4. First, the total estimate of revenues from onshore minerals production is developed. From this total, the cost of producing, collecting, and distributing Federal onshore mineral leasing revenues borne by the MMS Royalty Management Program, the Bureau of Land Management, and the Forest Service are deducted. Next, the amount collected for distribution by other Federal agencies is deducted. This amount is estimated to be 6 percent of the total revenues collected, as historically experienced. Alaska's estimated receipts are then deducted prior to determination of amounts available for the distribution to the Lower 48 States because of Alaska's unique revenue sharing arrangements.

Table 4

Method of Estimating the FY 1987 Mineral Revenue Distribution to States

(Dollars in millions)

	Receipts	Payments to States
Estimated Onshore Mineral Leasing Receipts for FY 1987	$1,293	
Deduct:		
Cost of Collecting and distributing Federal onshore revenues	125	
Amounts collected for other distribution (6% of receipts less cost recovery).	70	
SUBTOTAL	$1,098	
Deduct:		
Designated revenues of $15 million for Alaska; $3 million for ANILCA; and $16 million for NPRA (revenue sharing formula for Alaska uses a different percentage for Alaskan payments, hence, Alaska estimated revenues are deducted prior to lower 48 States distribution)	34	
SUBTOTAL	$1,064	
91% (11/12) of $1,064 million is distributed in FY 1987;	968	
plus 9% of FY 1986 collections of $1,124.	101	
TOTAL Lower 48 States' net receipts to be collected in FY 1987 before distribution between Federal and States' share	1,069	
Less--Federal Government's share (50%).	534	
Distribute to Lower 48:		$ 535
Distribute to Alaska:		
91% of Alaska and ANILCA FY 1987 monies of $18 million;	16	
plus 9% of FY 1986 collections of $17 million.	2	
TOTAL Alaska and ANILCA net receipts to be collected States' share	18	
Less--Federal Government's share (10%).	2	
Distribute to Alaska:		$ 16
Mineral Leasing Receipts Distributed to States		551
Interest on late payments		1
DISTRIBUTION AMOUNTS TO ALL STATES		$552

The designated amount to be distributed to Alaska and ANILCA (the NPRA receipts are distributed by the Bureau of Land Management) is added to the Lower 48 total to arrive at total distribution amounts to all States.

Under the Federal Oil and Gas Royalty Management Act of 1982, receipts are to be distributed to the States in the month immediately following the month of collection beginning in October, 1983. When estimating the annual amount available for distribution to the States, there is a lag between fiscal years that must be taken into account. Receipts that are collected in September, 1987 (the current fiscal year), will be distributed in October, 1987 (the following fiscal year). Thus, 91 percent of current fiscal year collections and 9 percent of prior year collections are calculated to derive the current year distribution amount. The estimated distribution of this amount is based on the percentage of total mineral leasing revenues historically generated within the boundaries of each State.

Cost Recovery

Beginning in FY 1987, the relevant onshore mineral leasing costs of the MMS, the Bureau of Land Management, and the Forest Service are proposed to be deducted from Federal onshore mineral leasing receipts before such receipts are distributed between the Treasury and the States. Historically, the States have shared the gross receipts of the onshore minerals programs without taking into account the Federal costs of obtaining and distributing those receipts. The onshore minerals programs have been funded entirely by the Federal Treasury while the States have shared only in distribution of revenues. States receive at least fifty (50) percent of the receipts from onshore mineral leasing, but this percentage would now be based on net receipts after deducting the cost of program management. This formula represents an equal distribution of these costs to the direct beneficiaries of the program rather than to the general public.

Approximately 74 percent of the MMS's Royalty Management Program workload is dedicated to Federal onshore lease activities, based primarily on the percentage of producing leases. The cost recovery formula thus deducts 74 percent of the total Royalty Management Program's costs (which includes a prorata share of administrative costs) from the onshore mineral leasing receipts before distribution between the States and the Treasury. The offsets related to MMS's collection and disbursement costs total $37.6 million. Also, the relevant costs of BLM's fluid and solid energy mineral and nonenergy minerals leasing programs are deducted ($62.4 million), along with a prorata share of BLM administrative costs, ($11.9 million), for a total offset in BLM of $74.3 million. In addition, cost recovery includes the relevant onshore mineral leasing costs of the Forest Service's Minerals Area Management Program ($13.1 million). This brings the total cost sharing proposal to $125.0 million in FY 1987.

As can be seen on Table 5, the net effect to the States of the $125.0 million FY 1987 cost recovery will be $53.5 million. Minerals Management Service will review annually the formula for allocating royalty management costs to assure equity among all States that share in these revenues.

Table 5

ESTIMATED FY 1987
MINERAL REVENUE PAYMENTS TO THE STATES
(Dollar amounts in thousands)

	FY 1985 Outlays	FY 1986 Estimated Payments	FY 1987 Gross Payments	Cost Recovery	FY 1987 Est. Net Payments
Alabama	200	214	225	20	205
Alaska	13,026	14,185	15,588	1,379	14,209
Arizona	1,129	1,206	1,267	112	1,155
Arkansas	718	767	806	71	735
California	41,833	44,681	46,942	4,154	42,788
Colorado	42,752	45,663	47,974	4,245	43,729
Florida	73	78	82	7	75
Idaho	3,767	4,023	4,227	374	3,853
Kansas	761	813	854	76	778
Louisiana	795	849	892	79	813
Michigan	44	47	49	4	45
Mississippi	1,073	1,146	1,204	107	1,097
Montana	21,140	22,579	23,722	2,099	21,623
Nebraska	320	342	359	32	327
Nevada	9,903	10,577	11,112	983	10,129
New Mexico	149,878	160,082	168,184	14,883	153,301
North Dakota	9,481	10,126	10,639	941	9,698
Oklahoma	2,916	3,115	3,273	290	2,983
Oregon	1,761	1,881	1,976	175	1,801
South Dakota	1,227	1,311	1,377	122	1,255
Utah	34,771	37,138	39,018	3,453	35,565
Washington	640	684	719	64	655
Wyoming	199,274	212,840	223,612	19,788	203,824
Minnesota	2	2	2	- -	2
Texas	11	12	13	1	12
West Virginia	28	30	32	3	29
Subtotal	537,523	574,391	604,148	53,462	550,686
Interest on Late Payments	1,051	800	800	- -	800
TOTAL	538,574	575,191	604,948	53,462	551,486

Decrease from 1987 Base

(Dollar amounts in thousands)

	FY 1987 Base	FY 1987 Estimate	Difference
($)	174,381	[illegible]	-23,[illegible]
(FTE)	(--)	(--)	(--)

In FY 1987 payments to the States are expected to decrease due to the deduction of the costs of program management from gross receipts of onshore mineral leasing, before such receipts are shared between the Federal Treasury and the States.

Justification of Program and Performance

Activity: Interest on Late Payments

(Dollar amounts in thousands)

Activity		FY 1986 Enacted to Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc.(+) Dec.(-) from Base
Interest on Late Payments	($) (FTE)	-- (--)	-- (--)	800 (--)	800 (--)	-- (--)

30 U.S.C. 191, *et seq.* P.L. 66-146	The Mineral Lands Leasing Act of 1920, as amended, provides for the sharing of receipts with States on a monthly basis from various mineral leasing activities on Federal lands within their boundaries.
30 U.S.C. 1714, 1721(b),1721(d)	The Federal Oil and Gas Royalty Management Act of 1982 provides for timely payments of royalty funds from oil and gas production on Indian lands to Indian accounts and for payments of interest to States and Indian accounts when funds are not disbursed as required by 30 U.S.C. 191 and 1714.

Interest on Late Payments

Objective

- Provide interest to States and Indian accounts when mineral leasing revenues are not disbursed by the dates prescribed in 30 U.S.C. 191 and 1714.

Base Program

The Federal Government shares revenues from Federal mineral leasing activities with States in which the revenues were generated. Indian lessors receive all the revenue from mineral leasing activities on their land. The Minerals Management Service collects, processes, accounts for, audits, and distributes bonuses, rents, royalties, and interest due the Federal Government to States and various Indian accounts from mineral leasing activities. Funding for this service is provided by three subactivities within the Royalty Management budget activity of the Leasing and Royalty Management appropriation--Mineral Revenue Collections, Mineral Revenue Compliance, and Systems Development and Operation. This activity provides annual indefinite authority to make payments of interest to States and Indian accounts when mineral leasing revenues due them are not disbursed within the timeframes prescribed by the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA).

Need for these Payments

The FOGRMA of 1982 changed the distribution of payments to the States for their share of mineral leasing revenues from a semi-annual to a monthly schedule. For States, payments must be made by the last business day of the month in which receipts are warranted by the United States Treasury. In addition, FOGRMA provides that deposits of any royalty funds from oil or gas production on Indian lands will be made to appropriate Indian accounts at the earliest practicable date, but in no case later than the last business day of the month in which such funds are received. Section 111 of the Act provides that interest computed at a rate applicable under Section 6621 of the Internal Revenue Code of 1954 is owed if the payment schedules listed above are not met.

However, receipts cannot be disbursed to State accounts until a proper determination can be made of the source of all incoming royalties. Generally, two situations exist which cause this to happen and result in late payment liability: (1) A shortfall within a payor's cash account or (2) an error, which prevents a royalty accounting line item from processing through the system. Thus, in the second instance, MMS has the cash available, but cannot determine to whom the cash belongs until the error is corrected.

Cash Shortfall

The Auditing and Financial System (AFS) is designed to track royalties reported at the account identification number (or line) level. AFS was not designed to track cash received at the line level. Such a capability would involve a major system redesign. Technically, the only automated option available to MMS in meeting late payment provisions of FOGRMA is to compute late payment interest based on the lapse between the time a line is reported and the time the line is disbursed to the State. Thus, if a payor reports $100 of royalty due in January, pays it in April, and MMS disburses the State's share in April, the AFS computes an interest penalty of 60 days (March and April) even though MMS's first opportunity to remit to the State was April (since the cash was not collected until April). This situation represents cash shortfall at the payor level. Cash shortfalls at the payor level can occur for several reasons:

-- A payor reports (MMS-2014) royalties owed but remits less than the total reported liability, or pays late. MMS issues bills to payors who underpay (principal and interest) their royalty liability.

-- A payor makes an error in reporting the royalty liability (over reports) but pays the correct amount.

-- Payor cash is credited to the incorrect account, due to either an MMS or payor error.

-- Adjustment (negative) lines are rejected by the system edits (while the positive lines clear), giving the appearance to the system that a cash shortfall exists. Until the negative (-) lines are corrected, apparent shortfalls will continue.

Errors

AFS data base errors can be separated into three broad categories -- lease errors, other data base errors, and errors in royalty/sales reports.

Lease errors

-- These errors occur for several reasons. MMS may have an error in its data base; BLM may not have forwarded lease or production notices to MMS; or the payor may have submitted erroneous data in the royalty report (MMS-2014).

Other data base errors

-- Before payors are authorized to submit royalty reports to MMS, they are required to file a Payor Information Form (PIF) identifying the leases, revenue sources, products, and selling arrangements. This data, which is reviewed, verified and entered into the AFS, is used to compare with monthly royalty information submitted by the payor. In a general sense it is similar to the comparison a payroll system would make between the basic employment and financial information in the reference data file and the employee's weekly timecard.

MMS's comparison of payor information and reported royalties may disagree either because the payor failed to file the necessary information; the payor committed an error on the royalty report; or MMS had an error in the data base.

Errors in royalty/sales reports

-- This occurs when a payor omits certain information, or provides incomplete, erroneous and/or inconsistent information from the royalty report (MMS-2014). The opportunity for payor errors is far greater than the opportunity for lease-related or other data base errors.

If funds cannot be specifically identified to particular leases, they are deposited into a suspense account. The errors or discrepancies which cause the funds to be unidentified need resolution before the information can be incorporated into the monthly receipt distribution and payment can be made to the various State, Federal, and Indian receipt accounts. Accordingly, MMS personnel must review and correct these errors before funds will be distributed/disbursed. Some errors require more time to research and coordinate than others, particularly when MMS requires additional payor information and input from surface management agencies.

In contrast to the State interest situation, interest on Indian late payments does generally not result from cash shortfalls or royalty errors. Indian cash is transferred to the Bureau of Indian Affairs (BIA) as soon as practicable (normally within two to four working days) after it is collected. End of the month collections will normally be subjected to interest calculations, because MMS is unable to transfer them to BIA until the beginning of the next month.

As long as this system relies on people to maintain it, as well as the dependence on other agencies and royalty payors to input data, there will always exist a set of conditions which will cause MMS to incur late payment interest liability.

In FY 1985, the AFS processed approximately 2.3 million lines of data. Of that total, almost 300 thousand lines (containing 416 thousand errors) were rejected. As a result, MMS has undertaken several initiatives to reduce errors.

On September 21, 1984, the Department promulgated regulations (30 CFR 241) which establish monetary penalties for improper reporting. Since errors related to the royalty/sales reports constitute a large percentage of the total number of errors, it can be expected that the regulations will provide an incentive for reporter accuracy, and thus reduce interest payments in the future. In addition, an intensive effort involving MMS contractor personnel is presently underway to reduce the error rate in the system (in particular, the error rate associated with the reference data base). The principal focus of this effort to date is the reconciliation of lease data to assure that each lease is properly identified in the system and to clean up the backlog of payor information forms (PIF's) which had accumulated. Moreover, MMS has made substantial progress in reducing the backlog of uncorrected, rejected lines by nearly 50 percent during the past year (from 30,375 uncorrected lines at the end of September 1984, to 15,834 lines at the end of September 1985) and by nearly 25 percent in the last quarter alone. This also compares to the approximately 200,000 lines of data received each month.

MMS also established a contract with Martin Marietta Data Systems to install a new hardware configuration and reimplement the Auditing and Financial System (AFS) software onto it. Starting in early FY 1987 when the new hardware is in operation and AFS has been reimplemented, improvements may be realized due to increased access time to make online error corrections. This will also result in savings in interest payments. In addition, MMS currently is publishing addenda to the Payor Handbook which, over time, will help to reduce errors in payor submitted royalty/sales reports.

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Payments to States from Receipts Under Mineral Leasing Act
Program and Financing (in thousands of dollars)

14-5003-0-2-852	FY 1985 Actuals	FY 1986 Estimate	FY 1987 Estimate
Program by activities:			
Direct program:			
00.0101 Payments to States	537,523	574,391	550,686
00.0201 Interest on late payments	1,051	- -	800
10.0001 Total obligations (object class 41.0).	538,574	574,391	551,486
Financing:			
39.0001 Budget authority	538,574	574,391	551,486
Budget authority:			
Current:			
40.0001 Appropriation (indefinite)	1,051	- -	800
Permanent:			
60.0001 Appropriation (indefinite)	537,523	574,391	550,686
Relation of obligations to outlays:			
71.0001 Obligations incurred, net	538,574	574,391	551,486
90.0001 Outlays	538,574	574,391	551,486

Reduction Pursuant to Public Law 99-177

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Payments to States from Receipts Under Mineral Leasing Act
Program and Financing (in thousands of dollars)

14-5003-6-2-852	FY 1985 Actuals	FY 1986 Estimate	FY 1987 Estimate
Program by activities:			
10.0001 Total obligations......................	- -	-23,895	- -
Financing:			
Offsetting collections from:			
21.4001 Unobligated balance available, start of year: Appropriation..............	- -	- -	-23,895
24.4001 Unobligated balance available, end of year: Appropriation..............	- -	23,895	23,895
39.0001 Budget authority......................	- -	- -	- -
Relation of obligations to outlays:			
71.0001 Obligations incurred, net.............	- -	-23,895	- -
90.0001 Outlays...............................	- -	-23,895	- -

Authorizing Language

Interest on Refunds

Authorizing language is currently being developed and will be submitted to the Congress during February 1986.

Justification for Proposed Legislation

Activity: Royalty Management
Subactivity: Interest on Refunds

(Dollar amounts in thousands)

Subactivity		FY 1986 Enacted To Date	FY 1986 Adjusted Appropriation	FY 1987 Base	FY 1987 Estimate	Inc.(+)/ Dec.(-) from Base
Interest on Refunds	($)	—	--	--	200	+200
	(FTE)	(--)	(--)	(--)	(--)	(--)

Authorization

Authorizing language is currently being developed and will be transmitted to the Congress during February 1986.

Objective

- o To assure an equitable payment of interest foregone is made to royalty payors who successfully appeal royalty payment orders and are refunded all or part of the principal paid to and held by the Government.

Justification for Proposed Legislation

Royalty payors who contest a particular assessment or royalty payment obligation are required to pay the disputed amounts to MMS pending administrative appeal or judicial review. In some cases, all or some portion of the amount so paid ultimately is determined to be not owing to the United States, an Indian account, or an Alaska Native Corporation.

MMS believes that paying appropriate interest on the amount refunded for the period of time during which the disputed amount has been in the accounts of the Government would reflect greater fairness and better practice toward the royalty payors. The interest rate provided is one which corresponds closely to the time value of the funds; it is not a punitive interest rate.

Proposed for later transmittal, proposed legislation

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Minerals and Royalty Management
Program and Financing (in thousands of dollars)

14-1917-2-1-302	FY 1985 Actuals	FY 1986 Estimate	FY 1987 Estimate
Program by activities:			
10.0001 Total obligations (object class 43.0).	—	—	200
Financing:			
40.0001 Budget Authority (appropriation)......	—	—	200
Relation of obligations to outlays:			
71.0001 Obligations incurred, net.............	—	—	200
90.0001 Outlays..........................	—	—	200

DEPARTMENT OF THE INTERIOR

MINERALS MANAGEMENT SERVICE

Payments to States from Receipts under Mineral Leasing Act

(Supplemental now requested under existing legislation)

Notwithstanding any other provision of law, in fiscal year 1986, moneys received from sales, bonuses, royalties (including interest charges collected under the Federal Oil and Gas Royalty Management Act of 1982), and rentals of the public lands under the provisions of the Mineral Lands Leasing Act of 1920, as amended, and the Geothermal Steam Act of 1970, not payable to a State or to the Reclamation Fund, shall be available for the payment of interest in accordance with 30 U.S.C. 1721 (b) and (d), prior to crediting of such funds to miscellaneous receipts of the Treasury.

EXPLANATION OF REQUEST

The Federal Oil and Gas Royalty Management Act of 1982 requires the Government to make payments of interest to States and Indian accounts when Federal onshore mineral leasing revenues due them are not disbursed within the timeframes prescribed by the Act. These payments from receipts under the Mineral Leasing Act cannot be disbursed until a proper determination is made of the source of all incoming royalties. Although the primary causes of delays in disbursement (payor input errors and processing errors) can be minimized, absolute eradication of errors is unlikely. Based on experience during FY 1985, it is estimated that $800,000 will be needed to pay interest to States and Indian accounts on FY 1986 late disbursements. The MMS currently has no source of available funds from which to pay this interest. Therefore, this supplemental is proposed to provide for annual, indefinite authority since absolute amounts cannot be accurately estimated in advance.

Minerals Management Service
FY 1986 Supplemental Request
Interest on Late Payments

SUMMARY OF REQUIREMENTS

Appropriation: Payments to States from Receipts under Mineral Leasing Act

(Dollars in thousands)

Comparison by Activities:	1985 Actual	1986 Pending	1986 Supple.	1987 Estimate
Payments to States	537,523	574,391	--	574,391
Interest on Late Payments	1,051	--	800	800
Total, Payments to States ...	538,574	574,391	800	575,191

Justification of Program and Performance

Activity: Interest on Late Payments

Activity		1986 Presently Available	1986 Proposed Supplemental	1986 Revised Estimate
		(Dollar amounts in thousands)		
Interest on Late Payments	($)	--	800	800
	(FTE)	(--)	(--)	(--)

30 U.S.C. 191, *et seq.* P.L. 66-146	The Mineral Lands Leasing Act of 1920, as amended, provides for the sharing of receipts with States on a monthly basis from various mineral leasing activities on Federal lands within their boundaries.
30 U.S.C. 1714, 1721(b),1721(d)	The Federal Oil and Gas Royalty Management Act of 1982 provides for timely payments of royalty funds from oil and gas production on Indian lands to Indian accounts and for payments of interest to States and Indian accounts when funds are not disbursed as required by 30 U.S.C. 191 and 1714.

Interest on Late Payments

Objective

- o Provide interest to States and Indian accounts when mineral leasing revenues are not disbursed by the dates prescribed in 30 U.S.C. 191 and 1714.

Base Program

The Federal Government shares revenues from Federal mineral leasing activities with States in which the revenues were generated. Indian lessors receive all the revenue from mineral leasing activities on their land. The Minerals Management Service collects, processes, accounts for, audits, and distributes bonuses, rents, royalties, and interest due the Federal Government to States and various Indian accounts from mineral leasing activities. Funding for this service is provided by three subactivities within the Royalty Management budget activity of the Leasing and Royalty Management appropriation--Mineral Revenue Collections, Mineral Revenue Compliance, and Systems Development and Operation. These three subactivities exist under annual, definite budget authority. A permanent, indefinite appropriation consisting of only one budget activity (Payments to States from Receipts under Mineral Leasing Act) exists to provide payment of the States' share of revenues. The activity proposed by this supplemental would be included in the Payments to States from Receipts under Mineral Leasing Act appropriation and would have annual, indefinite authority to provide payments of interest to States and Indian accounts when mineral leasing revenues due them are not disbursed within the timeframes prescribed by the Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA).

Need for Supplemental

The FOGRMA of 1982 changed the distribution of payments to the States for their share of mineral leasing revenues from a semi-annual to a monthly schedule. For States, payments must be made by the last business day of the month in which receipts are warranted by the United States Treasury. In addition, FOGRMA provides that deposits of any royalty funds from oil or gas production on Indian lands will be made to appropriate Indian accounts at the earliest practicable date, but in no case later than the last business day of the month in which such funds are received. Section 111 of the Act provides that interest computed at a rate applicable under Section 6621 of the Internal Revenue Code of 1954 is owed if the payment schedules listed above are not met.

However, receipts cannot be disbursed to State accounts until a proper determination can be made of the source of all incoming royalties. Generally, two situations exist which cause this to happen and result in late payment liability: (1) a shortfall within a payor's cash account or (2) an error, which prevents a royalty accounting line item from processing through the system. Thus, in the second instance, MMS has the cash available, but cannot determine to whom the cash belongs until the error is corrected.

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The Auditing and Financial System (AFS) is designed to track royalties reported at the account identification number (or lease) level. AFS was not designed to track cash received at the line level. Such a capability would require a major system redesign. Technically, the only automated option available to MMS in meeting late payment provisions of FOGRMA is to compute late payment interest based on the lapse between the time a line is reported and the time the line is disbursed to the State. Thus, if a payor reports $100 of royalty due in January, pays it in April, and MMS disburses the royalty share in April, the AFS computes an interest penalty of 60 days (March and April) even though MMS's first opportunity to remit to the State was April because the cash was not collected until April. This situation represents cash shortfall at the payor level. Cash shortfalls at the payor level can occur for several reasons:

-- A payor reports (Form 2014) royalties owed but remits less than the total reported liability, or pays late. MMS issues bills to payors who underpay (principal and interest) their royalty liability.

-- A payor makes an error in reporting the royalty liability (over-reported) but pays the correct amount.

-- Payor cash is credited to the incorrect account, due to either an MMS or payor error.

-- Adjustment (negative) lines are rejected by the system edits (while the positive lines clear), giving the appearance to the system that a cash shortfall exists. Until the negative (-) lines are corrected, apparent shortfalls will continue.

Errors

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-- These errors occur for several reasons. MMS may have an error in its data base; BLM may not have forwarded lease or production notices to MMS; or the payor may have submitted erroneous data in the royalty report (MMS-2014).

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-- Before payors are authorized to submit royalty reports to MMS, they are required to file a Payor Information Form (PIF) identifying the leases, revenue sources, products, and selling arrangements. This data, which is reviewed, verified and entered into the AFS, is used to compare with monthly royalty information submitted by the payor. In a general sense it is similar to the comparison a payroll system would make between the basic employment and financial information in the reference data file and the the employee's weekly timecard.

MMS's comparison of payor information and reported royalties may disagree either because the payor failed to file the necessary information; the payor committed an error on the royalty report; or MMS had an error in the data base.

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-- This occurs when a payor omits certain information, or provides incomplete, erroneous and/or inconsistent information from the royalty report (MMS-2014). The opportunity for payor errors is far greater than the opportunity for lease-related or other data base errors.

If funds cannot be specifically identified to particular leases, they are deposited into a suspense account. The errors or discrepancies which cause the funds to be unidentified need resolution before the information can be incorporated into the monthly receipt distribution and payment can be made to the various State, Federal, and Indian receipt accounts. Accordingly, MMS personnel must review and correct these errors before funds will be distributed/disbursed. Some errors require more time to research and coordinate than others, particularly when MMS requires additional payor information and input from surface management agencies.

In contrast to the State interest situation, interest on Indian late payments does generally not result from cash shortfalls or royalty errors. Indian cash is transferred to the Bureau of Indian Affairs (BIA) as soon as practicable (normally within two to four working days) after it is collected. End of the month collections will normally be subjected to interest calculations, because MMS is unable to transfer them to BIA until the beginning of the next month.

As long as this system relies on people to maintain it, as well as the dependence on other agencies and royalty payors to input data, there will always exist a set of conditions which will cause for MMS to incur late payment interest liabilities.

In FY 1985, the AFS processed approximately 2.3 million lines of data. Of that total, almost 300 thousand lines (containing 416 thousand errors) were rejected. As a result, MMS has undertaken several initiatives to reduce errors.

On September 21, 1984, the Department promulgated regulations (30 CFR 241) which establish monetary penalties for improper reporting. Since errors related to the royalty/sales reports constitute a large percentage of the total number of errors, it can be expected that the regulations will provide an incentive for reporter accuracy, and thus reduce interest payments in the future. In addition, an intensive effort involving MMS contractor personnel is presently underway to reduce the error rate in the system (in particular, the error rate associated with the reference data base). The principal focus of this effort to date is the reconciliation of lease data to assure that each lease is properly identified in the system and to clean up the backlog of payor information forms (PIF's) which had accumulated. Moreover, MMS has made substantial progress in reducing the backlog of uncorrected, rejected lines by nearly 50 percent during the past year (from 30,375 uncorrected lines at the end of September 1984, to 15,834 lines at the end of September 1985) and by nearly 25 percent in the last quarter alone. This also compares to the approximately 200,000 lines of data received each month.

MMS also established a contract with Martin Marietta Data Systems to install a new hardware configuration and reimplement the Auditing and Financial System (AFS) software onto it. Starting in early FY 1987 when the new hardware is in operation and AFS has been reimplemented, improvements may be realized due to increased access time to make online error corrections. This will also result in savings in interest payments. In addition, MMS currently is publishing addenda to the Payor Handbook which, over time, will help to reduce errors in payor submitted royalty/sales reports.

The MMS currently has no source of available funds from which to pay this interest. To provide a source of funding, the Department explored the possibility of establishing an interest bearing suspense account, the interest from which would be used to pay interest to the States. However, legal authority to establish such an account does not currently exist. An amendment to either the Mineral Lands Leasing Act of 1920 or FOGRMA would be required. Even then, under FOGRMA the interest rate on late payments to States and Indian accounts would be higher than the rate normally paid by Treasury on funds in interest bearing suspense accounts. Depending on the average balance of funds in the suspense account, this "interest gap" might have to be compensated for by transferring funds into the interest bearing account from the general fund or some other account. Because of these complications, establishment of an interest bearing suspense account is not considered to be the preferred alternative.

The establishment of a separate budget activity in this account with annual, indefinite authority is being requested for the following reasons:

- While an estimate of the amount required for interest payments has been made, the actual amount cannot be accurately predicted in advance and is only partially within the control of Royalty Management personnel. Indefinite authority is most appropriate in this situation. Further, the amount of these payments will fluctuate with the amount and timeliness of mineral leasing revenue disbursements. Indefinite authority will avoid surplus or deficit funding situations in the operational subactivities funded by a definite appropriation. This, in turn, will minimize the unpredictability and potentially damaging impact of interest payment fluctuations on other MMS operations.

- Payments of interest on late payments to the States and Indian accounts is mandatory under 30 U.S.C. 1721(b) and (d).

Supplemental now requested, existing legislation

DEPARTMENT OF THE INTERIOR
Minerals Management Service
Payments to States from Receipts Under Mineral Leasing Act
Program and Financing (in thousands of dollars)

14-5003-1-2-852	FY 1985 Actuals	FY 1986 Estimate	FY 1987 Estimate
Program by activities:			
10.0001 Total obligations (object class 41.0).	--	800	--
Financing:			
40.0001 Budget Authority (appropriation) (indefinite)........................	--	800	--
Relation of obligations to outlays:			
71.0001 Obligations incurred, net.............	--	800	--
90.0001 Outlays.........................	--	800	--